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# NEW JERSEY TURNPIKE AUTHORITY



TRAFFIC AND REVENUE REPORT

NEW JERSEY TURNPIKE

September 1949

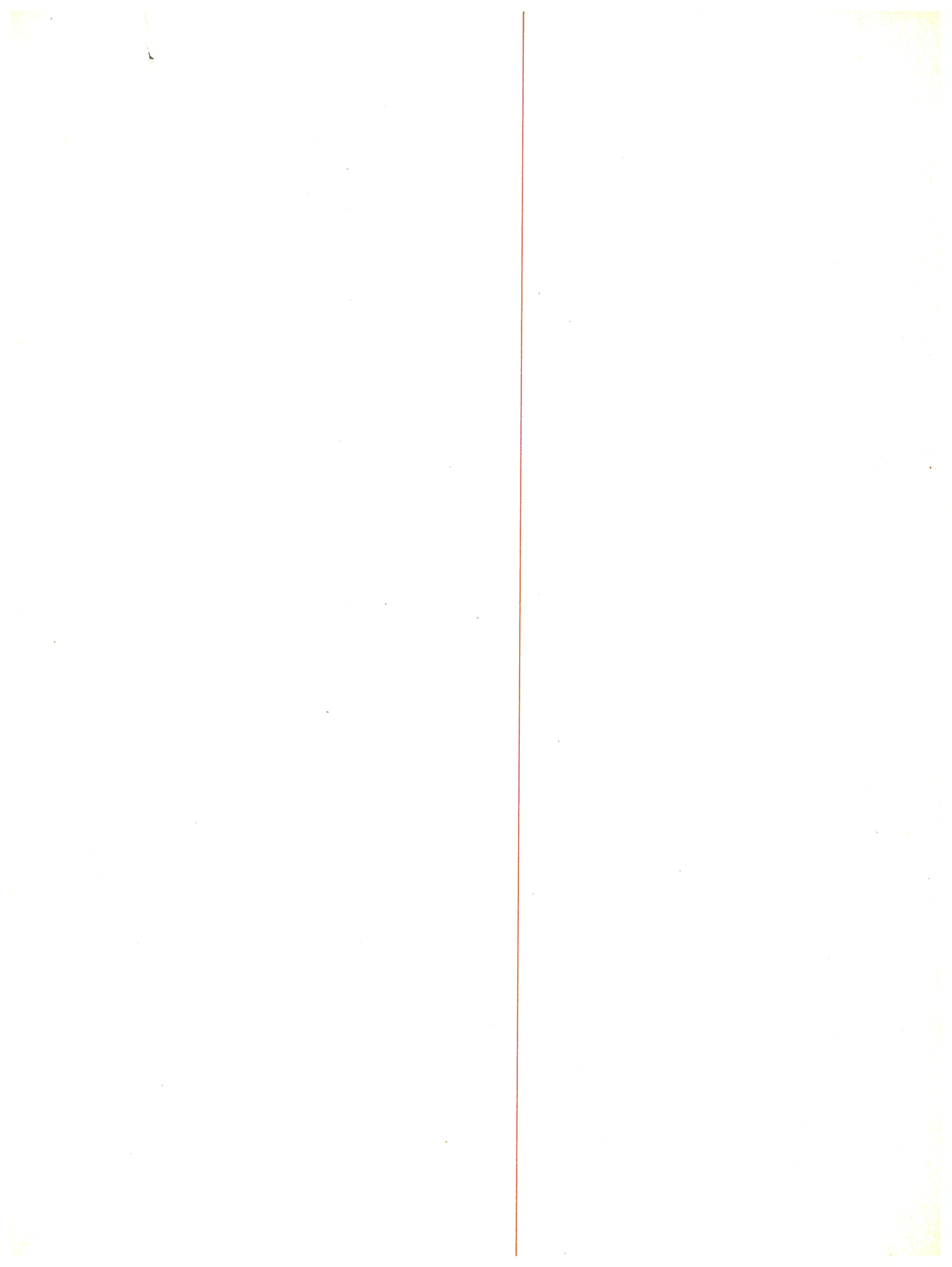
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COVERDALE AND COLPITTS  
Consulting Engineers

REPORT ON  
ESTIMATED TRAFFIC AND REVENUES  
OF THE  
PROPOSED NEW JERSEY TURNPIKE

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September 12, 1949



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September 12, 1949

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NEW JERSEY TURNPIKE AUTHORITY  
Statehouse  
Trenton, New Jersey

Dear Sirs:

Complying with your instructions, we have made studies for the purpose of estimating the traffic and revenues, including those from concessions, of the proposed New Jersey Turnpike, from its junction on the north with Route 6, leading to the George Washington Bridge, to its junction on the south with the Delaware Memorial Bridge, now in process of construction across the Delaware River from Deepwater, New Jersey. This bridge will connect the Turnpike with Route U. S. 13 and 40, leading south to Baltimore and Washington.

The use of the proposed Turnpike will substantially shorten the present traveling time between New York or northeastern New Jersey points and the Jersey coast resorts or points south. More important, is the fact that it will by-pass towns, eliminate grade crossings and traffic lights and will provide a much safer highway relieving drivers of the strain and tension resulting from using the present congested routes.

We have based our estimates of traffic and revenue on tolls of \$1.75 for through passenger cars and \$4.50 for trucks. In our opinion, these rates will produce the maximum amount of revenue. As the users of the highway will benefit to a greater extent on the northern portion of the Turnpike, and as this portion is much more costly than the southern portion, the rate of toll proposed is not uniform throughout the length of the Turnpike but varies from approximately 3½ cents a mile on the northern section to one cent a mile on the southern section.

The savings in time will vary depending upon the time of the day, the day of the week and season of the year. We estimate that passenger cars making

a full trip will save, on the average, an hour and ten minutes over the closest competing route, and trucks approximately an hour and a half. There will also be a saving in distance for over-all users of the Turnpike of approximately eight miles. Those wishing to use only certain sections of the Turnpike may, in some instances, have to travel a slightly greater distance than via the nearest free route. It is our experience, however, that slightly greater distances do not deter motorists from using modern, high-speed highways.

The results of our studies are given in the following tabulation which shows, by years, the probable traffic, revenue from traffic and concessions, total revenue, the estimated operating expenses as given us by the Authority's engineer and the net amount available for debt service after deducting the estimated expenses.

These estimates are based on highway conditions which now exist, and assume that future State Highway construction will not duplicate any portions of the proposed Turnpike construction.

#### ESTIMATED RESULTS OF OPERATION

<i>Year</i>	<i>Vehicles</i>	<i>Vehicular Revenue</i>	<i>Concession Revenue</i>	<i>Total Revenue</i>	<i>Operating Expenses</i>	<i>Balance Available for Debt Service</i>
1952	7,600,000	\$ 7,150,000	\$ 536,000	\$ 7,686,000	\$1,500,000	\$ 6,186,000
1953	8,750,000	8,250,000	619,000	8,869,000	1,500,000	7,369,000
1954	10,100,000	9,500,000	713,000	10,213,000	1,500,000	8,713,000
1955	11,100,000	10,450,000	784,000	11,234,000	1,500,000	9,734,000
1956	12,000,000	11,300,000	848,000	12,148,000	1,500,000	10,648,000
1957	12,500,000	11,800,000	885,000	12,685,000	1,500,000	11,185,000
1958	13,000,000	12,300,000	923,000	13,223,000	1,500,000	11,723,000
1959	13,500,000	12,800,000	960,000	13,760,000	1,500,000	12,260,000
1960	14,000,000	13,300,000	998,000	14,298,000	1,500,000	12,798,000
1961	14,500,000	13,800,000	1,035,000	14,835,000	1,500,000	13,335,000
1962	15,000,000	14,300,000	1,072,000	15,372,000	1,500,000	13,872,000
1963	15,500,000	14,800,000	1,110,000	15,910,000	1,500,000	14,410,000
1964	16,000,000	15,300,000	1,148,000	16,448,000	1,500,000	14,948,000
1965	16,500,000	15,800,000	1,185,000	16,985,000	1,500,000	15,485,000
1966	17,000,000	16,300,000	1,222,000	17,522,000	1,500,000	16,022,000
1967	17,500,000	16,800,000	1,260,000	18,060,000	1,500,000	16,560,000
1968	18,000,000	17,300,000	1,297,000	18,597,000	1,500,000	17,097,000
1969	18,500,000	17,800,000	1,335,000	19,135,000	1,500,000	17,635,000
1970	19,000,000	18,300,000	1,374,000	19,674,000	1,500,000	18,174,000
1971	19,500,000	18,800,000	1,410,000	20,210,000	1,500,000	18,710,000
1972	20,000,000	19,300,000	1,448,000	20,748,000	1,500,000	19,248,000
1973	20,500,000	19,800,000	1,485,000	21,285,000	1,500,000	19,785,000
1974	21,000,000	20,300,000	1,523,000	21,823,000	1,500,000	20,323,000
1975	21,500,000	20,800,000	1,560,000	22,360,000	1,500,000	20,860,000

The above estimates of traffic, while stated by years, are intended to forecast the trend over the period covered by the estimates rather than the specific volume of traffic in any particular year.

The following tabulation shows the approximate rate at which an issue of \$230,000,000 three per cent bonds could be retired, assuming all the net earnings were available for interest and amortization and the bonds retired at par. The retirement of the bonds at a reasonable premium would postpone the final maturity date about one year.

**APPROXIMATE AMORTIZATION SCHEDULE**

<i>Year</i>	<i>Balance Available for Debt Service</i>	<i>Interest at 3 Per Cent</i>	<i>Available for Amortization</i>	<i>Bonds Outstanding \$230,000,000</i>
1952	\$ 6,186,000	\$6,900,000	\$ -714,000	—
1953	7,369,000	6,900,000	+469,000	—
1954	8,713,000	6,900,000	1,813,000	\$228,432,000
1955	9,734,000	6,850,000	2,884,000	225,548,000
1956	10,648,000	6,765,000	3,883,000	221,665,000
1957	11,185,000	6,648,000	4,537,000	217,128,000
1958	11,723,000	6,513,000	5,210,000	211,918,000
1959	12,260,000	6,357,000	5,903,000	206,015,000
1960	12,798,000	6,180,000	6,618,000	199,397,000
1961	13,335,000	5,982,000	7,353,000	192,044,000
1962	13,872,000	5,761,000	8,111,000	183,933,000
1963	14,410,000	5,518,000	8,892,000	175,041,000
1964	14,948,000	5,251,000	9,697,000	165,344,000
1965	15,485,000	4,960,000	10,525,000	154,819,000
1966	16,022,000	4,645,000	11,377,000	143,442,000
1967	16,560,000	4,303,000	12,257,000	131,185,000
1968	17,097,000	3,936,000	13,161,000	118,024,000
1969	17,635,000	3,541,000	14,094,000	103,930,000
1970	18,174,000	3,118,000	15,056,000	88,874,000
1971	18,710,000	2,666,000	16,044,000	72,830,000
1972	19,248,000	2,185,000	17,063,000	55,767,000
1973	19,785,000	1,673,000	18,112,000	37,655,000
1974	20,323,000	1,130,000	19,193,000	18,462,000
1975	20,860,000	554,000	20,306,000	—

A summary of our report follows showing the scope of the study, the sources of traffic and the general method of estimating the volume and revenues of diverted traffic. This is followed in turn by our detailed report.

**Scope**

The scope of this study is to estimate the traffic and revenue that will accrue to the proposed New Jersey Turnpike, hereinafter referred to as the Turnpike. No description of the Turnpike is included herein since that matter falls within the scope of other engineers of the Authority. Certain assumptions in respect of location of the Turnpike and its interchanges with existing

highways are stated in order to facilitate understanding of the traffic flow. This report does not include estimates of the traffic that will be attracted to the Turnpike by the projected Newark Bay Bridge and the proposed Jersey City Turnpike between Holland Tunnel and the projected bridge. This subject will be covered in a supplementary report.

## **SUMMARY AND CONCLUSIONS**

### **Location and Type of Turnpike**

The projected location of the Turnpike with relation to competing routes and the points of interchange with the highway system are shown on the several maps, Exhibits 1 and 2. The traffic estimates which follow, including the tolls, assume the high type of highway described by the Authority's engineers, with permissible operating speeds on the portion south of the junction of Route 35 up to 70 mph. and north of this junction up to 60 mph. It is understood grades will not exceed three per cent.

### **Present Sources of Traffic**

The obvious sources of the base traffic load for the Turnpike are the heavily traveled highways which now carry the major part of the vehicular traffic between northeastern New Jersey or New York and New Jersey shore points or Wilmington, Delaware and points south thereof. These are Route U. S. 1 from the north to the Raritan River crossing near New Brunswick; and from there south two more or less parallel routes: (1) U. S. 1, crossing the Delaware River at Trenton and continuing southwest through Philadelphia, west of Wilmington to Baltimore, Washington and points south; or from Philadelphia south by Route U. S. 13 through Wilmington and south by Route U. S. 40 to Baltimore; and (2) U. S. 130 to Camden and Deepwater, New Jersey, crossing the Delaware River by the Pennsville Ferry and continuing south on Routes U. S. 13 and 40. The ferry crossing at Pennsville will be discontinued when the Delaware Memorial Bridge, now under construction at Deepwater, is opened to traffic. The Turnpike will connect with this bridge.

### **Survey Locations to Ascertain Origin and Destination**

In order to determine what part of the traffic using these highways might be diverted to the Turnpike, we made continuous five-day surveys at eleven points to determine the origin and destination of vehicles using the routes

described above. These counts were started on June 16 and completed on August 9, 1949. The locations of the survey stations are shown on the maps, Exhibits 1 and 2. During the course of this survey, origins and destinations of 556,410 vehicular trips, both passenger and trucks, were determined. The methods used and detailed results are discussed in Chapter I of this report.

#### **Estimate of Total Volume of Traffic on Nearby Most Competitive Routes**

The counts for five days were expanded to a weekly and an annual basis by the application of relationships of the five-day period to the week and the year, based on statistical records of the State Highway Department at various continuous counting stations. As a control, we have the known annual volume of vehicles passing the continuous counting stations and also the yearly records of traffic on the George Washington Bridge, Lincoln and Holland tunnels, the Staten Island bridges, Burlington-Bristol, Tacony-Palmyra and Philadelphia-Camden bridges, and Chester and Pennsville ferries. On these facilities we also have the relationship of the week to the year. This process is more fully explained in Chapter II.

#### **Method of Estimating Number of Vehicles Now Using Competitive Facilities That Could Be Diverted to the Turnpike**

The primary method of estimating the number of vehicles that could be diverted to the Turnpike was to weigh the advantages offered by it over competing routes such as the elimination of congestion, grade crossings and traffic lights, increased safety and easier and nice, pleasant driving conditions as well as possible savings in time and distance against the toll. No attempt was made to set up a rigid formula because of the many sections where city driving, traffic light frequency, etc., would cause diversions which are hardly susceptible of precise measurement. This method is more fully described in Chapters III and IV and is outlined below.

The points of access to and egress from the Turnpike are shown in Table I which follows:

**TABLE I**

<i>Interchange Point</i>	<i>Location</i>	<i>Routes and Areas Served</i>
0	Deepwater	Connects with Delaware Memorial Bridge and all points to the south, also to Wilmington and the area west thereof.
1	Swedesboro	Connects by Route U. S. 322 and ferry to Chester, Pa.
2	South Camden	Connects with Route N. J. 42 and proposed North and South Expressway to Camden.
2-A	North Camden	Connects with Tacony-Palmyra Bridge by Route N. J. S-41 and Camden by Routes S-41 and 38.
3	Mt. Holly	Connects with highway leading to Burlington-Bristol Bridge.
4	Bordentown	Connects with Trenton to the north by Routes 39 and 37 and with Atlantic City to the south by Route U. S. 206.
4-A	Hightstown	Connects with Asbury Park by Route N. J. 33 and with Trenton to the south by Routes U. S. 130 and N. J. 33.
5	New Brunswick	Connects with New Brunswick to the west by Route S-28 and with Asbury Park and Atlantic City to the east.  Vehicles traveling from the north to Jersey coast points and using the Edison Bridge across the Raritan River can, in times of congestion on this bridge (especially during summer week ends), use this interchange to advantage.
5-AS	Route 4 Parkway	This parkway is now under construction and will eventually extend north to Paterson, and south to the Edison Bridge.
5-A	Route 35	Route 35 leads directly south to Edison Bridge and is used by the Jersey shore traffic.
6	Elizabeth	Connects by Baltic Street with Bayway Avenue leading west to Elizabeth and east to Goethals Bridge.
6-A	Port Street	Connects with Route 25. Serves Newark Airport, Holland Tunnel and the Porth of New York Authority truck terminal on Route 25 to the north.
7	Raymond Blvd.	Serves primarily traffic to Newark from points north and south.
7-A	Route 3	Serves Passaic traffic to the west and Lincoln Tunnel traffic to the east.
8	Route 6	Serves Paterson and Route 17 to the northwest and George Washington Bridge to the east.

In order to analyze the traffic flow and determine which vehicles would constitute potential traffic for the Turnpike, the areas served were divided into zones. The zone boundaries were so chosen as to include areas directly served by each interchange point. Different zones had to be used for the origin of

northbound vehicles or the destination of southbound vehicles, and the origin of southbound or the destination of northbound vehicles. Because of the difference in passenger car and truck routes different zones had to be used for passenger cars and trucks, in one instance. The zones applicable to the southbound passenger vehicles interviewed at the Cranbury and Deans survey stations are shown on Exhibits 1 and 2.

In each zone there are ordinarily one or more points which all vehicles moving to or from the Turnpike or the competing routes must pass. These are referred to as common points. The relative times and distances from zone to zone are measured from a common point in zone of origin to common point in zone of destination.

The time and distance were computed for movements of vehicles using the Turnpike from each interchange point to every other interchange point, including the time and distance to and from common point to point of access to or egress from the Turnpike. The time and distance were computed for each corresponding movement via the most advantageous competing route. A comparison of the results furnished the means of measuring the relative trip time and distance advantages, if any, offered by the Turnpike.

The relative distances by existing highways were scaled from county maps and checked by odometer readings. Distances by way of the Turnpike were computed from plans of the Turnpike. Times on the Turnpike were taken for passenger cars at an over-all speed of 55 mph, and for trucks at 50 mph. Speeds on existing highways were based on experience and observations made in driving over the various routes at different times of day and under different conditions of congestion. Due allowance was made for the varying highway conditions, such as dual highway, city streets with traffic light control, etc. Time of transit by truck was based partly on schedules of common carrier trucks and partly on recorded speeds of trucks.

Time, convenience and safety of driving are the principal factors in the choice of route by drivers of passenger cars. Adverse distance, in itself, appears to have little influence.

Comparative times and distances between zones for passenger cars and trucks are shown in Appendices O and Q. Some typical time and distance comparisons for passenger cars under average conditions are as follows:

		<i>Via Turnpike</i>	<i>Via Best Competitive Route</i>	<i>Saving</i>
Delaware River Memorial Bridge to junction with Route 6 near Ridgefield	Time — Hours & Minutes	2:10	3:20	1:10
	Distance — Miles	118	126	8
Delaware River Memorial Bridge to New Brunswick	Time — Hours & Minutes	1:33	2:09	0:36
	Distance — Miles	85	89	4
New Brunswick to junc- tion with Route 6	Time — Hours & Minutes	0:43	1:11	0:28
	Distance — Miles	37	37	0
New Brunswick to junc- tion with Route 3	Time — Hours & Minutes	0:40	0:58	0:18
	Distance — Miles	34	31	-3
Newark Airport to junc- tion with Route 3	Time — Hours & Minutes	0:13	0:18	0:05
	Distance — Miles	10	9	-1

Corresponding typical time and distance comparisons for trucks are as follows:

Delaware River Memorial Bridge to junction with Route 3 near Secaucus*	Time — Hours & Minutes	2:20	3:40	1:20
	Distance — Miles	115	121	6
Delaware River Memorial Bridge to Port Street**	Time — Hours & Minutes	2:09	3:15	1:06
	Distance — Miles	106	111	5

\* Secaucus is an important terminal point for common carrier trucking companies.

\*\* The motor truck terminal of the Port of New York Authority, now under construction on Route 25 north of Port Street, Newark, will make this an important terminal point for trucking operations.

In estimating diversions, consideration was given to unusual conditions occurring at certain hours, particularly at such locations as the Raritan River where vehicles which now use the Edison Bridge might be diverted to the new Turnpike bridge at hours of congestion, and the area between Elizabeth and Route 3 which is extremely congested at certain hours, also, for passenger cars to ease and safety of driving, and for trucks to elimination of unnecessary stops by traffic lights.

In the course of our study, we have interviewed the principal truck operating companies doing business in this area.

#### **Projection of Present Traffic Levels to Opening of Turnpike, 1952**

The estimate of the base volume of traffic available to the Turnpike by diversions from the neighboring highways was computed at present levels and then increased to 1952 levels by a consideration of prevalent trends on various

pertinent facilities such as the New Castle-Pennsville Ferry, the Philadelphia-Camden and other nearby Delaware River bridges, the Trenton bridges, Holland and Lincoln tunnels and George Washington Bridge. The rates of growth on most of these facilities have been very rapid, particularly since the removal of the gasoline restriction in August 1945. Traffic is now moving at what appears to be a high level, but there is not yet evident any lessening in the upward trend. As a normal increase in 1952 over 1949, we have estimated 20 per cent, equivalent to an annual increase of slightly over six per cent per year.

In projecting to 1952 it is necessary to allow for the completion of the Delaware River Memorial Bridge at Deepwater, the completion to King of Prussia of the Pennsylvania Turnpike, the Philadelphia Expressway from King of Prussia to the Philadelphia city line, and for the completion of Route 4 Parkway from Edison Bridge to Route 28 between Elizabeth and Plainfield. The matter of future projection is discussed in detail in Chapter V.

#### **Projection Beyond 1952**

The trend subsequent to 1952 will be influenced by all the factors making for normal growth and also by continued expansion of expressway systems and improved facilities, whether they improve the competitive position of the Turnpike or possibly detract from it. Important facilities are:

The completion of Chesapeake Bay Bridge and the gradual improvement of the highways connecting therewith, both on the eastern and western shores of Chesapeake Bay. This will improve the route between points on the north and Washington, as it will by-pass Baltimore completely.

Extension of the Pennsylvania Turnpike, either to a connection with the New Jersey Turnpike near Bordentown or Bristol, would contribute traffic to the Turnpike. The present preferred routes for vehicles, both passenger cars and trucks, moving between northeastern New Jersey or New York and the Pennsylvania Turnpike are: crossing the Delaware at Phillipsburg-Easton, and crossing the Delaware at Lambertville. The latter crossing will become the preferred route when the Pennsylvania Turnpike extension to King of Prussia is completed in 1950. If the Pennsylvania Turnpike should be extended to New Hope, Pa., opposite Lambertville, it would make this route more competitive with the New Jersey Turnpike than if the extension were to be made to a connection with the New Jersey Turnpike near Bordentown or Bristol.

Completion of the New York Interstate Parkway from Route U. S. 6 in the Palisades Interstate Park to its junction with Route U. S. 9W leading

south to N. J. Route 6 and the Turnpike will benefit the Turnpike as will the completion of the New York State Thruway to its junction with Route N. J. 17 near Suffern. This route provides easy access to the Turnpike.

The completion of Route 4 Parkway in New Jersey, which is now under construction by the State Highway Department, will provide an important feeder link for the proposed Turnpike. Although it will attract some vehicles that might use the northern portion of the Turnpike, the volume of traffic that it will collect and lead to the Turnpike will, in our opinion, more than offset any possible competing effect it might be considered to have on the Turnpike. It is understood that no new Parkway bridge will be built across the Raritan River and that traffic on the Parkway will be routed both to the present free Edison Bridge and the proposed Turnpike bridge. This latter traffic will be subject to the Turnpike tolls.

The State of Massachusetts is contemplating the construction of an expressway or toll highway as an extension from Route Conn. 15 to the New Hampshire toll road at its northern boundary.

Eventually, there will be an expressway system from New England and northeastern New York through New Jersey to Baltimore, Washington and the South, with an arm reaching through Pennsylvania. This arm will be extended through Ohio if plans materialize.

A more detailed statement as to these expressways and their possible effect appears in Chapter VI of this report.

Their existence is a most important factor in the projection of future traffic for the Turnpike. We have taken into account the rates of growth of population and motor vehicular registration in the areas contiguous to and tributary to the Turnpike, but these increases do not measure the full rate of growth of the Turnpike which figuratively funnels traffic to and from many areas. The rapidity of growth on new facilities is abundantly evident in the history of all such facilities within or adjoining the area tributary to the Turnpike. It is sometimes difficult to separate the influence of expanding contributory facilities from growth and the creation of new riding, and in this case we have combined the effects.

#### **Induced Traffic**

Induced traffic, as herein used, means diversions from routes other than those from which the estimate of base traffic was derived, and new riding not heretofore taking place.

Other diversions include those from Routes N. J. 28 and 29 leading to Lambertville and Phillipsburg, respectively, and some from back roads used to avoid the heavy traffic of the main routes. This would include Route 27 between Elizabeth and Trenton.

Consideration has been given to new riding which will be created between the area in the vicinity of New Brunswick and New York, between northeastern New Jersey and New York, and New Jersey shore points and, to a lesser degree, to new long distance riding. As the provision of improved roads in the twenties was accompanied by a corresponding increase in the use of automobiles, so it may be anticipated that the creation of a new and extensive system of expressways, of which the Turnpike is a part, will stimulate an increase in the use of motor vehicles in excess of the increase in the number of vehicles.

The effect of developments such as those described above can be observed in the study of traffic growth, particularly on the Henry Hudson Bridge and Bronx Whitestone Bridge in New York, and the Merritt Parkway and the Charter Oak Bridge, Hartford, Conn., which show the effects of the expansion of connecting and contributing expressways.

The effect of rate of growth and induced traffic is combined in the projected traffic and revenues presented on page 3.

#### **Summary of Estimated Volume of Traffic Between Interchange Points**

The estimated volume of traffic on the Turnpike between interchange points, as projected for 1952 and for 1956, is shown in Table II which follows:

**TABLE II**  
**New Jersey Turnpike**  
**Estimated Traffic Density**

	<i>Distance Miles</i>	<i>1952</i>		<i>1956</i>	
		<i>Annual Volume</i>	<i>Average Daily Volume</i>	<i>Annual Volume</i>	<i>Average Daily Volume</i>
(0) Deepwater	13.0	1,480,658	4,056	2,338,499	6,407
(1) Swedesboro	12.5	1,616,177	4,428	2,552,533	6,993
(2) South Camden	8.9	1,705,932	4,674	2,694,289	7,382
(2A) North Camden	10.2	2,141,860	5,868	3,382,779	9,268
(3) Mt. Holly	8.7	2,175,589	5,960	3,436,049	9,414
(4) Bordentown	14.6	2,205,035	6,042	3,482,556	9,542
(4A) Hightstown	15.3	2,262,713	6,199	3,573,650	9,792
(5) New Brunswick	8.0	3,676,312	10,072	5,806,239	15,907
(5A) Route 35	8.9	4,687,761	12,843	7,403,686	20,284
(6) Elizabeth	5.1	4,906,035	13,442	7,748,421	21,228
(6A) Port Street	2.3	4,149,394	11,368	6,553,408	17,954
(7) Raymond Blvd.	6.1	4,894,470	13,409	7,730,155	21,178
(7A) Route 3	4.1	3,452,748	9,460	5,453,149	14,940
(8) Route 6					
Total	117.7				

### **Projection Beyond 1956**

In projecting beyond 1956 the same general method was used as described above. History shows that facilities in strategic locations serving an expanding system continue for many years to grow at a rate substantially higher than the rate of growth of motor vehicle use. The rates used in this vary from 4.4 per cent in 1957 to 2.5 per cent in 1975, which summarizes the results of our estimate.

### **Toll Schedule**

After a study of the contributions which the Turnpike makes to economy, convenience and safety of driving, and of the toll rates in force on other facilities, we are of opinion that the toll rates set forth on page 14 are reasonable and proper at commencement of operations. The matter of tolls is discussed in greater detail in Chapter III. The rates for passenger vehicles are higher than those on Pennsylvania Turnpike, while those on trucks are lower. Moreover, the passenger car rates on the section north of the Raritan River are higher than those south thereof. This latter difference recognizes the relatively greater benefit such drivers obtain in relief from congestion, as well as the greater investment per mile in the northern section. Tolls for trucks are less than on the Pennsylvania Turnpike, even on a mileage basis, because the competitive routes in the instant case are superior to those in the former case. The principal disadvantage to trucks in the instant case is the congestion and the traffic control lights requiring unnecessary stopping and starting, while the competing routes of the Pennsylvania Turnpike have the disadvantages of heavy grades and poor alignment.

## New Jersey Turnpike

### Proposed Toll Schedule

<i>Between Stations</i>		<i>Distance Miles</i>	<i>Pass- enger Cars</i>	<i>2 Axle Trucks</i>	<i>3 Axle Single Unit Trucks</i>	<i>Semi- Trailer Trucks</i>
(0) Deepwater	(1) Swedesboro	13.0	\$ .15	\$ .25	\$ .30	\$ .40
(1) Swedesboro	(2) South Camden	12.5	.15	.25	.30	.40
(2) South Camden	(2A) North Camden	8.9	.10	.15	.20	.25
(2A) North Camden	(3) Mt. Holly	10.2	.10	.15	.20	.25
(3) Mt. Holly	(4) Bordentown	8.7	.10	.15	.20	.25
(4) Bordentown	(4A) Hightstown	14.6	.15	.25	.30	.40
(4A) Hightstown	(5) New Brunswick	15.3	.15	.25	.30	.40
(5) New Brunswick	(5AS) Rt. 4 Parkway*	6.8	.10	—	—	—
		<u>90.0</u>	<u>\$1.00</u>	<u>\$1.45</u>	<u>\$1.80</u>	<u>\$2.35</u>
(5) New Brunswick	(5A) Rt. 35 (8.0 mi.)	—	—	\$ .30	\$ .40	\$ .50
(5AS) Rt. 4 Parkway	(5A) Route 35	1.2	\$ .10	—	—	—
(5A) Route 35	(6) Elizabeth	8.9	.20	.30	.40	.50
(6) Elizabeth	(6A) Port Street	5.1	.20	.30	.40	.50
(6A) Port Street	(7) Raymond Blvd.	2.3	.10	.15	.20	.25
(7) Raymond Blvd.	(7A) Route 3	6.1	.20	.30	.40	.50
(7A) Route 3	(8) Route 6	4.1	.20	.30	.40	.50
		<u>27.7</u>	<u>\$1.00</u>	<u>\$1.65</u>	<u>\$2.20</u>	<u>\$2.75</u>
Sum of distances and section tolls		<u>117.7</u>	<u>\$2.00</u>	<u>\$3.10</u>	<u>\$4.00</u>	<u>\$5.10</u>
Maximum toll			<u>\$1.75</u>	<u>\$3.10</u>	<u>\$4.00</u>	<u>\$4.50</u>

\* Southbound passenger cars can enter and northbound passenger cars can leave the Turnpike at Rt. 4 Parkway. No trucks allowed on the Parkway.

### **Nonoperating Revenue**

Nonoperating revenue is that derived from lease of concessions, such as, gasoline and oil sales and restaurant privileges. Our estimate is based on the ownership by the Authority of the facilities provided and recognizes the one cent a gallon lower tax on motor fuel in New Jersey than in New York, and the two cents less than in Pennsylvania, Delaware and Maryland. This lower cost of fuel is an inducement for vehicles from out of New Jersey to buy in the state as they pass through. The basis of the estimate of nonoperating revenue is more fully stated in Chapter VII.

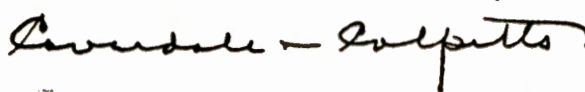
### **Results of Operation**

The estimated results of operation are set forth in the table on page 2.

### **Acknowledgments**

We are glad to have the opportunity to express our appreciation for the co-operation of the staff of the Turnpike Authority, its engineers, the New Jersey State Highway Department and the Port of New York Authority in supplying certain data for our study and the New Jersey State Police Department for providing police protection at our traffic survey points.

Respectfully submitted,



*Consulting Engineers.*

## I — TRAFFIC SURVEY STATIONS

The location of the survey stations is shown on Exhibits 1 and 2. It is obvious that the bulk of the traffic that would be immediately potential is that now using Route U. S. 1 and 9, New York to New Brunswick, and the two routes composed of (a) U. S. 1, New Brunswick to Trenton, Philadelphia to Baltimore and Washington, or U. S. 1, New Brunswick to Trenton and Philadelphia and U. S. 13 and 40, Wilmington, Baltimore and Washington, and (b) U. S. 130, New Brunswick to Camden and Pennsville and U. S. 13 and 40 to Baltimore and Washington.

In order to measure the traffic on these two routes, as well as other traffic potential to the Turnpike, surveys were undertaken at the following points:

- Cranbury on Route U. S. 130 and Deans on Route U. S. 1
- Pennsville-New Castle Ferry
- Chester Ferry
- Ridgefield, on Route U. S. 1 and 9 and State Route S-1
- State Route 3, as to traffic to and from the south
- Holland Tunnel
- Communipaw Avenue, primarily for truck traffic
- Newark Pike
- Newark Avenue Ramp to Pulaski Skyway, for passenger cars only
- Edison and Victory Bridges

The specific objectives and the results of the counts were as follows:

### **Cranbury Route U. S. 130 and Deans Route U. S. 1**

Counts were made at these points between New Brunswick and Trenton and Philadelphia since they afforded an opportunity to obtain information as to all of the long distance potential traffic for the Turnpike and the greater part of the potential traffic using less than the full length. With the cooperation of the state police, it was possible to stop all the vehicles on each of these counts and question the drivers as to origin and destination of each trip. The station near Deans on Route U. S. 1 was on the dual highway just south of the intersection of Route U. S. 1 and the county road leading east to Deans and the station on Route U. S. 130 was on the dual highway just north of the intersection of the road leading south to Cranbury. The survey commenced on Thursday, June 16, at 8:00 A. M. and continued uninterruptedly to 8:00 A. M. Tuesday, June 21, covering five 24-hour days and, in our opinion, provided a sufficient segment of a week to permit a reasonably accurate

extension to a full week and to a year. The relationships of the various weeks to the year are quite well established by numerous control stations maintained by the Highway Department.

Each vehicle operator was questioned as to his origin and to his destination. If the vehicle were coming from or going to New York City, he was questioned as to whether the origin or destination was south of 30th Street, between 30th and 180th Streets, or north of 180th Street; and, further, whether he had used or was proposing to use the Holland Tunnel, Lincoln Tunnel, or George Washington Bridge. Registration licenses were segregated between New Jersey, New York, New England and all other states. Passenger cars were classified by states as we considered cars from New England and states south and west most susceptible to diversion to the Turnpike, New York cars to almost as great an extent and New Jersey cars to a lesser extent. Trucks were classified as to size, as 2-axle, 3-axle single unit, 3-axle semi-trailer and larger. As we were not certain that we would be able to stop all vehicles a separate volume control count was maintained which classified the cars by states and the trucks by type.

A total of 110 men, in addition to supervisory force, were employed at these two stations; 56 at the station on U. S. 1 and 54 at the station of U. S. 130. At each point six of these men were engaged in making the over-all control counts and identifying states of registration.

The total number of cars interviewed on U. S. 1 at the Cranbury station during the period of the count was 55,571 and at the Deans station on U. S. 130 — 55,748. A summary of these counts is shown in Appendices A and B.

#### **Pennsville-New Castle Ferry**

The purpose of this count was to determine the origin of southbound vehicles and destination of northbound vehicles using this ferry to determine the number that would be potential for the Turnpike. Those vehicles going to or coming from points north of Cranbury were excluded in the final analysis as vehicles passing that point were included among those interviewed in the Cranbury survey and their inclusion in this count would result in duplication.

Due to the courtesy of the Delaware-New Jersey Ferry Company, drivers were interviewed on the ferries during the trip across the river. As all of the drivers could not be interviewed due to their absence from their cars, it was necessary to have a volume control count which was carried out at the

tollhouses. This survey was started at 8:00 A. M. Thursday, August 4, and continued uninterruptedly until 8:00 A. M. Tuesday, August 9. The number of men used in making the count was 23, of whom four were engaged in making the control count identifying passenger cars by state of registration, and trucks by type and number of axles as at other points.

The total number of vehicles for which origin and destination were obtained was 39,299, as compared with the total number counted at the control stations of 55,151. A summary of this count is shown in Appendix C.

#### **Chester Ferry**

The purpose of this count was similar to that at Pennsville; origin of southbound traffic using the ferry, and destination of northbound traffic was obtained. The interviewers were stationed between the toll gates and the ferries and interviewed the drivers after they had paid their tolls and were lined up waiting for the ferry. The men making the volume control counts were located at the tollhouses. The counts started at 8:00 A. M. Thursday, August 4 and continued uninterruptedly until 8:00 A. M. Tuesday, August 9. A total of eleven men working in 12-hour shifts were employed in making the interviews, and four in making the control count and car registration identification. Trucks, as in the other cases, were classified as to number of axles and type. The total number of vehicles interviewed was 23,117 compared with the total in the control count of 29,544 vehicles. The results of the count are shown in Appendix D.

#### **Ridgefield**

The purpose of this count was to secure information on those vehicles that might be potential users of the Turnpike making partial trips north of Cranbury and Deans in a manner similar to the counts at Pennsville and Chester ferries. Counts were made on U. S. Route 1 and 9 at Ridgefield circle (the junction of Edgewater Road) and on State Route S-1 (Bergen Boulevard) at Edgewater Road east of Ridgefield circle. Since these points are at approximately the northern terminal of the proposed Turnpike, it was sufficient for our purposes to ascertain as to southbound vehicles the destination, and as to northbound vehicles the origin of the trip. This information would indicate whether the vehicle questioned could use to advantage any part of the Turnpike.

As it was not practical on these busy routes to stop all vehicles and question them as to origin or destination, the State Highway Department arranged to lengthen the interval of the traffic light stop at these points for the five days

of the count so that north and southbound traffic was stopped for a 50-second instead of a 30-second interval. This permitted our interviewers who questioned drivers while traffic was held up by the red light to question a greater proportion of vehicles.

A total of 62 men were engaged on these counts, exclusive of supervisors; 12 of these were engaged in the classification count identifying all vehicles as to passenger cars, trucks, license plates, etc., and 50 were engaged in interviewing the vehicles. Trucks were classified as to the number of axles and as to single unit or semi-trailer.

As in the case of the Pennsville and Chester counts, in the final analysis only those vehicles having their origin or destination north of Cranbury and Deans were considered, as vehicles passing through Cranbury and Deans had been analyzed and included in the counts at those stations.

The survey was started at 8:00 A. M. on Thursday, July 14, at both stations, and ended at 8:00 A. M. on Tuesday, July 19. Origin and destination data on Route U. S. 1 and 9 were obtained for a total of 68,279 vehicles out of a total number of 124,043 counted during the period. On Route S-1 data were obtained from 23,872 vehicles out of a total of 76,083 vehicles. These counts are summarized in Appendices E and F, respectively.

### **Route 3 (Lincoln Tunnel)**

The purpose of this count was to determine the origin and destination of passenger cars to and from the south using the Lincoln Tunnel on the east and Route 3 west through Secaucus. No trucks were included at this point since there was a separate count made of all truck traffic using Communipaw Avenue—the main truck route to the south. This count did not include cars traveling north on Route U. S. 1 and 9 beyond this point, as such vehicles were included in the Ridgefield counts described above. In the final analysis, only those potential vehicles having their origin or destination north of Cranbury and Deans were considered in order to eliminate duplications.

For the purpose of these counts, three separate points were established at this station: one on the westbound-southbound connection from the Lincoln Tunnel to U. S. 1; one on the northbound-eastbound connection between U. S. 1 and Lincoln Tunnel, and one on the portion of Route 3 between the northbound and eastbound connection to Lincoln Tunnel, referred to above; and the main eastbound-westbound connection from Lincoln Tunnel to Route 3. These three points, therefore, covered all of the traffic originating on points south of the access to the Lincoln Tunnel destined to the Lincoln Tunnel or to points west

of Route U. S. 1 reached by Route 3, and for vehicles originating within the latter areas destined to points to which access is provided by Route U. S. 1 south.

In this count it was necessary to eliminate certain other vehicles besides those passing Cranbury and Deans because of duplications; namely, eastbound vehicles on Route 3 turning north on U. S. 1 through Ridgefield, southbound vehicles from Ridgefield destined to Lincoln Tunnel, and some few southbound vehicles from Ridgefield turning west on Route 3. Practically all of the south and westbound traffic, however, turned west on Paterson Plank before reaching our count station. All of the above traffic passed through one or another of our count stations on Route 3, as well as the Ridgefield stations.

North and eastbound cars to Lincoln Tunnel were stopped at a road block before entering the main route to the tunnel. East and southbound vehicles from the tunnel were interviewed as they slowed up before entering U. S. 1 and 9 south. East and southbound vehicles from Route 3 were interviewed at a road block (between the eastbound connection to the tunnel and the main route from the tunnel to the west) and north and westbound vehicles on Route 3 were interviewed as they stopped for the traffic light before entering the main route from the Lincoln Tunnel to the west.

Information was obtained as to the destination of vehicles going southbound on U. S. 1 and 9 and as to origin of vehicles coming northbound.

The method of this count eliminated the necessity of counting the traffic which continued on Route U. S. 1 north of the Lincoln Tunnel. This traffic had already been counted at Ridgefield. As in the count previously described, the origin and destination count was supplemented by a comprehensive count of all vehicles, including an identification of license plates of cars by states and classification of trucks by axle and type.

A total of 55 men were engaged on these counts; 46 in interviewing vehicles as to origin and destination, and 9 in making the volume control counts.

This count started 8:00 A. M. Thursday, August 4, and continued until 8:00 A. M. Tuesday, August 9. A total of 73,087 vehicles were interviewed out of a total of 87,959 vehicles passing the stations. The results of this count are shown in Appendices G and H.

### **Holland Tunnel**

The purpose of this count was to determine the origin and destination of all passenger cars using the Holland Tunnel which might be potential users of

the Turnpike, and which had not already been counted as potential users at the Cranbury and Deans stations. No trucks were counted at this point since there was a separate count made of all truck traffic using Communipaw Avenue—the main truck route south. Through the cooperation of the Port of New York Authority, our interviewers obtained information as to origin and destination as passenger car operators paid their tolls. The counting stations, therefore, were at the toll collection booths at the Holland Tunnel, both in New York and New Jersey. For our purposes it was only necessary to obtain the destination of the westbound cars and the origin of the eastbound cars. For control purposes, count of the total cars was made and the cars identified as to state of registration.

A total of 49 men were employed in making this count, 43 of whom interviewed the drivers and 6 maintained the over-all control count of passenger cars by state of registration. The period of the count was from 8:00 A. M. on Thursday, July 28 to 8:00 A. M. on Tuesday, August 2. During this period 148,584 vehicles were interviewed out of a total of 180,133. The results of this count are shown in Appendix I.

#### **Communipaw Avenue, Newark Pike and Pulaski Skyway Ramp to Newark Avenue Counts**

The main purpose of the count at Communipaw Avenue was to obtain origin and destination data for trucks as this is the principal truck route to and from the south. Trucks are not allowed to use the Pulaski Skyway. Similar data were also obtained from drivers of passenger cars using this route. This was a sample count wherein the information from drivers was secured while the vehicles were stopped by a red light. The station was located at the intersection of Communipaw and Hackensack Avenues, about midway between the Hackensack and the Passaic River bridges. At the time of our count the highway leading from Tonnelle Circle to Newark Pike and Communipaw Avenue, crossing the Hackensack River on the high level Newark Pike lift bridge and used by many trucks to avoid the low level bridge over the Hackensack River, was closed to traffic so that our count at this point covered the entire truck movement across these rivers.

Another count was made on the Newark Pike at the intersection of Schuyler Avenue, Kearny, for the purpose of getting information on vehicles traveling between Newark and points to the northeast which might be potential to the Turnpike. This was a sample count where the information was secured from drivers while the vehicles were stopped by a red light. As the location of the station was comparatively close to Newark and there was little business

activity between it and Jersey City, we deemed it sufficient for our purposes to obtain only the origin of westbound vehicles and the destination of eastbound vehicles, assuming that for practically all vehicles one end of their trip was in Newark or its immediate vicinity.

As some passenger car traffic to or from Jersey City and its vicinity left or entered the Pulaski Skyway by Newark Avenue, an origin and destination count was conducted at this point. As the volume of traffic was small, we were able to interview practically all the drivers.

All of the above counts commenced at 8:00 A. M. Thursday, July 21, and were completed at 8:00 A. M. on Tuesday, July 26. A total of 58 men were engaged, 46 of whom were used in interviewing the drivers of vehicles and 12 in making the overall control counts of vehicles identifying all passenger cars by state of registration and trucks as to 2-axle, 3-axle single unit or semi-trailers. The movement of vehicles for which origin and destination was obtained at each of the counting stations compared with the total number of vehicles passing the counting stations is as follows: Communipaw Avenue total interviewed 36,084, total counted 126,471; Newark Turnpike total interviewed 13,306, total counted 41,282; Newark Avenue Ramp to Pulaski Skyway total interviewed 21,463, total counted 23,138. A summary of these counts is given in Appendices J, K and L.

#### **Edison and Victory Bridges**

The purpose of these counts was to determine the origin of southbound vehicles and destination of northbound vehicles using the Edison and Victory bridges on routes N. J. 35 and 4, respectively. This movement takes in traffic from north of the Raritan River to the various Jersey shore resorts as well as a large amount of local traffic.

The count at this point included an identification of passenger cars by license plates. The volume of traffic at points otherwise suitable for counting stations was too great to permit stopping vehicles for purposes of interview. Cars other than New Jersey cars were identified as to state of registration. New York cars were identified by prefix letters and numbers and New Jersey cars by prefix and suffix letters. This permitted their allocation to areas small enough for the purposes of our count. Trucks were identified over a 2-day period by name data. As they made up only about 6 per cent of the total traffic and a large number were local we deemed this sufficient.

The counts were made immediately north of the traffic circle and overpass by which traffic for Route N. J. 4 is separated from traffic for Route N. J. 35. These points are just south of the southerly approaches to the two bridges.

A total of 30 men were engaged on this count which started at 8:00 A. M. on Thursday, July 7 and was finished at 8:00 A. M. on Tuesday, July 12. A total of 226,390 vehicles were counted on the Edison Bridge during this period and a total of 83,542 on the Victory Bridge. A summary of these counts is given in Appendices M and N.

## **II — EXPANSION OF FIVE DAYS COVERED BY TRAFFIC COUNTS TO A FULL WEEK AND TO A FULL YEAR**

For the purpose of expanding the counts for five days to a week and then to a year, we had available daily, weekly and annual traffic counts made by the New Jersey State Highway Department at various counting stations, and also traffic records for the Holland Tunnel, Lincoln Tunnel, George Washington Bridge and other pertinent facilities.

### **Cranbury Count**

This traffic count was made on Route U. S. 130 just north of Cranbury. Practically 100 per cent of the traffic which passed the station during the five days of the count was interviewed.

Since the count was started at 8:00 A. M. on Thursday, June 16, and ended at 8:00 A. M. on Tuesday, June 21, we had, after combining traffic for eight hours on Tuesday with that for 16 hours on Thursday to make a constructed Thursday, traffic for each day of the week except Tuesday and Wednesday. Our next step was to obtain the relationship of Thursday traffic to that for Tuesday and Wednesday. For this purpose we analyzed the traffic counts made by the New Jersey State Highway Department at New Brunswick on Route U. S. 1, and at Pennsauken (just north of Camden) on Route U. S. 130. At New Brunswick, for the week ending June 14, 1949, the average of the Tuesday and Wednesday traffic was 98.5 per cent of Thursday; and at Pennsauken, for the week ending June 21, 1949, it was 95.6 per cent. We used 97 per cent, or the average for the two stations. The traffic for Tuesday and Wednesday was, therefore, estimated at 2 times 0.97 times Thursday's traffic, which was added to the actual traffic for five days to obtain the traffic for a full week.

To obtain the relationship of traffic during the week of our count to that for a full year at this point, we analyzed the traffic counts made by the New Jersey State Highway Department during the years 1946-1949 at New Brunswick, Windsor, Pennsauken and Bordentown.

Records were not available for each station for the entire period. At New Brunswick and Bordentown the ratio of the year to the week nearest that of our traffic count for the years 1946-1949, inclusive, averaged 46.3 and 45.6, respectively, while that at Windsor for the years 1948 and 1949 averaged 47.9, or an average of 46.6 for the three stations. This compares with 46.2 at Pennsauken for the year 1948. In expanding the Cranbury traffic for the week to a year, we multiplied the traffic by 46.6 to obtain a full year.

#### **Deans Count**

The count was made on the same days as described for the Cranbury count, and the Thursday 16-hour count plus the Tuesday 8-hour count was used as the traffic volume for Thursday.

After studying the traffic counts for the New Brunswick, Windsor, Pennsauken and Bordentown stations, referred to above, and other State counts at the Trenton (lower) Bridge and at Clarkesville (on Route U. S. 1) we have used the same factors in estimating the total traffic for the week and for the year as those used at Cranbury — 0.97 and 46.6, respectively.

#### **Pennsville-New Castle Ferry Count**

This count was made of the traffic using the Pennsville-New Castle Ferry during the period from 8:00 A. M. on Thursday, August 4 to 8:00 A. M. Tuesday, August 9, 1949.

During the five days 69.8 per cent of the passenger car and truck traffic which used the ferry was interviewed and the total traffic was counted by class of vehicle.

As in the previously described counts, the traffic for 16 hours on Thursday, plus that for 8 hours on Tuesday (12:00 M-8:00 A. M.), was considered as traffic for Thursday (24 hours). Based on the traffic record of the ferry for the week ending August 7 furnished us by the ferry company, the average of the Tuesday and Wednesday traffic was equal to 96.9 per cent of that for Thursday. We have used 2 times 0.969 times the traffic volume for Thursday to obtain the traffic volume for Tuesday and Wednesday to add to the 5-day count to obtain the traffic for the week.

The zone-to-zone movements obtained as a result of the survey were expanded by class of vehicle for each day to the volume count for the corresponding class of vehicle for the day.

We have estimated the ferry traffic for the year on the basis of the first seven months of 1949. Dividing this volume by the volume as computed for

the week produces the factor of 38.0, which we have used in expanding the week's traffic to that for a full year.

#### **Chester Ferry Count**

This count was made at the same time as the one at Pennsville and covered the identical hours.

The zone-to-zone movements obtained by the interviewers were expanded by class of vehicle to the volume for each day by the volume count for the corresponding class of vehicle for the day.

The traffic for the full week was given us by the ferry company. These figures show that the average of the Tuesday and Wednesday volumes was 96.9 per cent of the Thursday volume. In expanding our 5-day count to a full week, we added 2 times 0.969 times the traffic volume for Thursday to our 5-day count.

We have estimated the total number of vehicles using the ferry for 1949 from other data. Dividing this number by the number of vehicles for the week produces a factor of 33.5 which we used to expand the count for a week to that for a year.

#### **Ridgefield Counts**

As in the previous cases, the traffic volumes for the 16 hours on Thursday and the 8 hours on Tuesday were added together to get the traffic for a 24-hour Thursday.

As no weekly pattern of traffic in the immediate vicinity was available, we used the traffic pattern at the Lincoln Tunnel as our guide in expanding the 5 days to a week. During the week of the count the average volume of traffic on Tuesday and Wednesday at this location was the same as that on Thursday. We have, therefore, added twice the Thursday traffic to our 5-day counts to obtain the traffic for the week.

As a basis for expanding the traffic for the week to that for the year we have used the relationship of the estimated year 1949 to the week ending August 9 at the Lincoln Tunnel. This ratio is 52. We have, therefore, multiplied the traffic for the week by 52 in expanding our counts to a full year.

#### **State Route 3 Counts**

Only part of the traffic was interviewed in these counts. The number of interviews for the day were expanded to those for a full day by the volume counts for each class of vehicle.

The Lincoln Tunnel traffic pattern was used in expanding the count to a full week. For the week of August 3 to 9 the average of the Tuesday and Wednesday traffic was equal to the Thursday traffic. We have used twice the Thursday traffic at our survey stations to obtain the Tuesday and Wednesday traffic and added this to our 5-day count to get a full week.

In expanding the week to a year we have multiplied the expanded week by 52, the ratio of the estimated traffic for the year at Lincoln Tunnel to that for the week of August 3 to 9.

#### **Holland Tunnel Count**

As in the other cases the zone-to-zone movements obtained as a result of the interviews for each day were expanded to those for a full day on the basis of the daily volume counts by classes of vehicle. Since this count was made at the Holland Tunnel we have used the traffic pattern of that facility in expanding the 5-day count to a full week and also in expanding the traffic for the week to that for a full year. It was found that for the week ending August 2 the average volume of the Tuesday and Wednesday traffic for the Holland Tunnel was equal to that for Thursday and that the ratio of the estimated volume for the year 1949 to that for the week ended August 2 was 51.

#### **Communipaw Avenue Count**

During the 5 days of this count 28.5 per cent of the total passenger car and truck traffic passing the station was interviewed. The zone-to-zone movements obtained as a result of the interviews for each day were expanded to those for a full day on the basis of the daily volume counts by classes of vehicle.

The 24-hour traffic volume for Thursday was assumed as the sum of the 16 hours from 8:00 A. M. to M. Thursday and the 8 hours from M. N. to 8:00 A. M. on Tuesday. The Lincoln Tunnel traffic pattern was used as the basis of expanding the 5-day count to that for a full week and the week to a year.

For the week corresponding with that of our survey the average number of passenger cars using Lincoln Tunnel on Tuesday and Wednesday was 95 per cent of that on Thursday. The average volume of truck traffic for Tuesday and Wednesday was the same as that for Thursday. Therefore, in estimating Tuesday and Wednesday traffic we have used two times 0.95 times the Thursday passenger car volume and twice the Thursday truck volume. To expand the count to a year we have used the factor 52.

### **Count on the Newark Pike and Pulaski Skyway Ramp to Newark Avenue**

These counts were made at the same time as the Communipaw Avenue counts and have been expanded in the same manner and on the same basis, namely, the traffic pattern for Lincoln Tunnel.

### **III — PROPOSED TOLL SCHEDULE**

The tolls proposed for the use of the Turnpike are shown on page 14. For passenger cars they amount to \$1.75 for a full trip, equivalent to approximately 1.5 cents per mile, with the sum of intermediate rates adding to \$2.00. The rate for semi-trailer trucks for the full distance is \$4.50, equivalent to approximately 3.85 cents per mile, with rates for the intermediate distances adding to \$5.10. The toll for three-axle, single-unit trucks is \$4.00 and for two-axle trucks \$3.10. The only discounts for full length trips are on passenger cars and the heaviest classification of trucks.

The rate of toll has a controlling effect upon diversions and revenues. The law of diminishing returns begins to work if the toll is increased beyond a certain point. As a result of our study, we believe that the rates proposed will produce the maximum revenue and are reasonable, considering the contribution in convenience, time and safety which the Turnpike will make to its users. We believe they are also reasonable in comparison with tolls on other facilities. The use of the George Washington Bridge, Lincoln Tunnel or Holland Tunnel by passenger cars costs 50 cents. The use of the Pennsville Ferry by passenger cars costs 75 cents, plus 10 cents per passenger for an average of approximately 90 cents (excluding commutation vehicles). The crossing time for the Pennsville Ferry is about 12 minutes. The rate for passenger cars on the Chester Ferry is 50 cents, plus 5 cents for each additional passenger. The crossing time is about eight minutes.

The proposed rates are not uniform. The charge for the 90 miles south of Route 4 Parkway is only \$1.00, which rate is approximately the same per mile as the Pennsylvania Turnpike. The proposed rate on the northern 28 miles of the Turnpike, which is extremely costly and which gives users a greater advantage over competing routes than the southern portion, is also \$1.00, or at the rate of approximately 3.5 cents a mile. The full trip toll of \$1.75 is the same rate per mile, 1.5 cents, as the Maine Turnpike, on which the toll for the entire length is 60 cents.

The proposed full trip rate for semi-trailer trucks compares with a rate of \$7.50 for heavy trailer trucks with an allowable gross capacity between

30,000 and 39,000 pounds on the Pennsylvania Turnpike. Over 83 per cent of the truck revenue on that highway is from this class of vehicle. The Pennsylvania Turnpike offers users a highway which eliminates the heavy maintenance grades and the inferior alignment of its competitors. The New Jersey Turnpike will not offer its users the corresponding advantages over its competing routes, therefore, it is not in a position to charge such high rates.

The \$4.50 toll for a full length trip for semi-trailer trucks is equivalent to approximately 3.85 cents per mile, the same rate as the Maine Turnpike, on which the charge for heavy trucks is \$1.50. This over-all rate appears reasonable also, when viewed in consideration of the fact that heavy trucks must pay \$1.50 to use either the George Washington Bridge, Lincoln Tunnel or Holland Tunnel. The charge for semi-trailer trucks with a total length of between 40 and 45 feet on the Pennsville Ferry is \$1.80. This rate accounts for approximately 50 per cent of the total revenue from all trucks.

#### **IV — DIVERSIONS OF USERS OF EXISTING HIGHWAYS TO THE TURNPIKE**

Our estimates of the time and distance savings for passenger cars made possible by the use of the Turnpike in place of the present routes are shown in Appendix O, together with the per cent of traffic that we estimate will be diverted to the Turnpike.

While the saving in time for passenger vehicles making a full trip is approximately an hour and ten minutes and the saving in distance approximately eight miles, it is the absence of traffic lights, the superior roadway and the relief from the congestion on the present highways which, in our opinion, are the most important factors to balance against the toll in determining diversions to the Turnpike. It is, therefore, impossible to estimate diversions by any fixed formula.

The estimates of diversion depend upon the toll charged. As previously stated, the tolls proposed are, in our opinion, not out of line with the benefits offered or with the tolls charged on other facilities in the metropolitan district. We believe there are many persons who could and would gladly pay more but, on the other hand, there are large numbers who, although willing, would be unable to pay more. The passenger car toll of \$1.75 for the entire length which we recommend and on which we have based our estimates is, we believe, within the reach of the majority of persons who could make use of the proposed Turnpike and is, we believe, the toll that will produce the greatest amount of revenue.

The section of highway between New York, Baltimore and Washington, of which this forms a substantial portion, is one of the heaviest traveled routes in the United States, and as such we would expect its traffic to continue to increase in the future. Although the State of New Jersey has made improvements in the existing highways, traffic has kept pace with these improvements, with the result that there appears little likelihood of traveling conditions getting better, but on the contrary, the almost certain probability that, with the increased volume of automobiles on the road, and their greater use, traffic on the principal highways will become more dense and more congested.

At the present time, the Holland Tunnel is approaching its capacity. Consideration of a new crossing to the north is already under way. The present New Jersey State highway system offers no direct route for through traffic from the south other than via the Pulaski Skyway, Tonnelles Circle and Route U. S. 1 and 9; the latter a heavy truck route. The projected Turnpike will provide a new route for southern traffic destined to and from the north. It will also make available to the people of New England, New York and northeastern New Jersey a safe and quick route through an area which people now dread to travel, especially during the summer week ends when so many vehicles are bound to and from the New Jersey coast resorts.

The Pennsville Ferry will cease to operate upon the opening of the Delaware River Bridge and as the proposed toll rates are not above those now in effect on the ferry, all of the ferry traffic should use the new bridge which will connect directly with the proposed Turnpike.

The percentages of diversion shown in Appendix O have been arrived at after consideration of all the above, including trips made over the existing routes before and during our studies, and are the results of our judgment and experience with traffic problems more or less similar over almost a quarter of a century.

The application of the estimated percentages of diversion to the estimated traffic volumes for passenger car movements on the different sections of the Turnpike and the revenue derived from such movements are shown in Appendix P.

#### **Diversion of Trucks**

Our estimates of the time and distance savings for trucks made possible by the use of the Turnpike in place of the present routes are shown in Appendix Q, together with the per cent of traffic that we estimate will be diverted to the Turnpike.

The proposed highway will save trucks traveling its full distance about an hour and a half in time and 9 miles in distance. It will relieve one of the points of greatest congestion on the present truck route from the south, namely, Communipaw Avenue and Tonnelle Circle. Communipaw Avenue provides the only crossing of the Passaic River for trucks on this north and south route as trucks are not allowed on the Pulaski Skyway. The bridge over this river is a low level structure and its numerous openings to accommodate the heavy water-borne traffic interrupt the flow of vehicular traffic many times a day. Vehicles using Communipaw Avenue, unless they turn north after crossing the Passaic River and use the higher level lift bridge on Newark Pike, must also cross the low level bridge over the Hackensack River. This bridge also opens many times daily.

From North Avenue, Elizabeth, south through Linden and Rahway, the present highway is crossed by a succession of city streets, all protected by stop lights. In addition, some of the larger industrial plants located on the highway have traffic lights which stop traffic for the benefit of their employees.

Although Highway U. S. 130 south of New Brunswick will be dualized for practically its entire length to Camden by the time the Turnpike is opened, we believe that the Turnpike will offer truckers such benefits in timesaving and safety of operation that it will pay them to use it at the rates proposed. The southern section of Route U. S. 130 is at the present time a two-lane highway and very difficult to drive on because of the large number of vehicles which enter the highway simultaneously as ferryboats dock at Pennsville and Chester. The saving in time of an hour and a half should be of greatest value to long distance truckers and those having a tight schedule at present, as it would permit them to leave their terminals later and still make deliveries at the same time.

As with the passenger cars, the advantages of the Turnpike must be weighed against the toll in considering diversions. The over-all tolls we propose — \$4.50 for semi-trailers, \$4.00 for three-axle single-unit trucks and \$3.10 for two-axle trucks — are, we believe, fair charges for the advantages offered. They are less than those in effect on the Pennsylvania Turnpike, which offers trucks savings over competing routes in the absence of heavy grades and better alignment which the New Jersey Turnpike cannot offer.

The application of the estimated percentages of diversion to the estimated traffic volumes for truck movements on the different sections of the Turnpike and the revenue derived from such movements are shown in Appendix R.

## V — FUTURE GROWTH AND INDUCED TRAFFIC

We have assumed the calendar year 1952 as the first year of operation of the proposed Turnpike. Our estimate of normal growth between 1949 and 1952 is based upon past traffic trends.

In this connection, we have reviewed the growth of traffic on facilities in the New York Metropolitan District which the northern end of this facility taps; on those across the Delaware River in the vicinity of Philadelphia, about midway of the Turnpike; and on the Pennsville Ferry, across the Delaware River, which will be the main feeder to this route from the south. The growth of traffic on these facilities is shown numerically in Appendices S, T and U and graphically on the chart, Exhibit III.

In studying the growth of traffic on the facilities crossing the Hudson River, we have combined the traffic on the Holland Tunnel, Lincoln Tunnel and George Washington Bridge because of diversions from one to another as the different facilities came into operation. We have also combined the total traffic on the above facilities with that on the ferries to get the total trans-Hudson traffic growth. In a similar manner, traffic on the Philadelphia-Camden Bridge, the Tacony-Palmyra Bridge and the Burlington-Bristol Bridge facilities in the Philadelphia area has been combined to study the rate of growth. The Pennsville Ferry has but one competitor, the Chester Ferry, approximately 14 miles to the north which will also be a feeder route to the Turnpike. We do not have complete traffic data on this ferry, but from studies which we have made are of opinion that its traffic volume over a period of years has been about half that of Pennsville.

The last normal year before the war was 1940. We have shown on the chart the trend of traffic on the facilities mentioned above over the nine-year period from 1940 to 1949, and the eight-year period, 1941-1949. In general, the eight-year period from 1941-1949 shows a slightly lower rate of growth which we believe was due to war activity increasing 1941 traffic above normal levels.

The Pennsville Ferry enjoyed the greatest increase in growth during this period. Since the rate of growth on a ferry depends more or less upon the number of boats and the service offered, its trend is not as reliable as that of other facilities providing passage for vehicles at all times. During the eight years from 1941-1949, traffic on this facility increased 62.9 per cent or at the average annual rate of 6.3 per cent, during the nine years from 1940-1949, 106.4 per cent—or at the average annual rate of 8.4 per cent—and from 1931 (the highest year before the depression) to 1945, 400 per cent, or at the annual average rate of 9.4 per cent.

The increase of traffic across the Hudson River, including all facilities, has been at a much lower rate. From 1941-1949 it increased 25.6 per cent, or at the average annual rate of 2.9 per cent; from 1940-1949, 34.2 per cent, or at the average annual rate of 3.3 per cent; and from 1932 (the highest year before the depression) to 1949, 89.2 per cent, or at an average annual rate of 3.8 per cent. Similar figures for the Holland and Lincoln Tunnel and the George Washington Bridge are: for 1941-1949, 67.3 per cent, or at an average annual rate of 6.6 per cent; 1940-1949, 84.2 per cent, or at an average annual rate of 7.0 per cent; from 1932-1949, 179.8 per cent, or at an average annual rate of 6.2 per cent.

From counts furnished us through the New Jersey State Highway Commission, traffic on the two Trenton bridges across the Delaware River has increased only 3.5 per cent between 1941-1949.

The traffic on the bridges across the Delaware River, in the vicinity of Philadelphia, increased 43.4 per cent between 1941-1949, or at an average annual rate of 4.6 per cent; 61.1 per cent between 1940-1949, or at an average annual rate of 5.5 per cent; and from 1930 (the highest year before the depression) to 1949, 70.6 per cent, or at an average annual rate of 3.5 per cent.

After consideration of the above, together with other data and studies that we have made, we have adopted a rate of six per cent as that which in our judgment, best represents the normal growth that may be expected up to the time the Turnpike opens. We have plotted this trend line on the chart, Exhibit III, for comparison with the past rates of growth on the facilities mentioned above. On this basis the normal traffic for 1956 would be 19.1 per cent over that of 1949.

We have shown in Appendix W population statistics over certain periods for New York City and adjacent counties and for the New York, Northeastern New Jersey Metropolitan District together with average annual rates of growth.

Motor vehicle registrations over a period of years for New York, New Jersey, Pennsylvania and the New England States are shown in Appendix X and for New Jersey counties in the New York Metropolitan District in Appendix Y together with average annual rates of growth over certain periods.

Induced traffic is composed of traffic not presently moving and that which will be diverted from routes other than those considered in estimating the basic traffic diverted to the Turnpike. The per cent of traffic induced by various new facilities in the past has varied greatly depending upon circumstances. The per cent has been high where traffic movements have been

physically curtailed before the new facility was open as with a bridge replacing a ferry, especially an inadequate ferry. In the present instance we believe the number of vehicles not moving due to limited capacity of the present highways is small. However, there are certain times of the year, especially during the summer when traffic cannot flow freely and trips are curtailed or made by some other method of transportation. We believe there are people now using the railroads to reach New York who would use the proposed Turnpike if it were in existence. We believe there are also many others who would make trips which they now refrain from making partly because of congestion and partly because of the strain of driving on the present highway.

This induced traffic may, in the case of a local facility, such as a bridge, be realized almost immediately upon its opening. With a facility such as a route approximately 117 miles in length as in the present case and used in substantial measure by vehicles from out of the state, such traffic develops more gradually.

In estimating the traffic volume for the years after the Turnpike is opened, we have combined the effect of growth and induced traffic. We have taken into consideration the completion of the Delaware River Memorial Bridge at Deepwater, the completion to King of Prussia of the Pennsylvania Turnpike, the Philadelphia Expressway from King of Prussia to the Philadelphia city line, and for the completion of Route 4 Parkway from Edison Bridge to Route 28 between Elizabeth and Plainfield. We have also taken into consideration the fact that the estimated diversions from the present highway may not be completely realized the first year of operation. Considering the combined effect of all these influences, we estimate that the volume of traffic for the first year the Turnpike is opened, 1952, will be 26 per cent above the basic diversions as estimated on the 1949 traffic level. We have estimated additional increases of 15 per cent to 1953, 15 per cent to 1954, 10 per cent to 1955 and 8 per cent to 1956, by which time we believe that the full effects of the highway improvement program will have been experienced and that future rates of increase will be less. After 1956 we have taken a constant arithmetical rate of increase equivalent to a geometrical rate of increase, diminishing gradually from 4.2 per cent in 1957 to 2.4 per cent in 1975.

The derivation of future traffic and revenue, based on the above rates of growth, is shown following:

<i>Estimated Diverted Traffic 1949 Basis</i>	<i>Vehicles</i>	<i>Revenue</i>
Passenger cars — from Appendix P ..	5,720,000	\$ 4,588,000
Trucks — from Appendix R ..	306,000	1,087,000
	6,026,000	\$ 5,675,000
1952 — 26 per cent increase .....	7,600,000	\$ 7,150,000
1953 — 15 per cent increase .....	8,750,000	8,250,000
1954 — 15 per cent increase .....	10,100,000	9,500,000
1955 — 10 per cent increase .....	11,100,000	10,450,000
1956 — 8 per cent increase .....	12,000,000	11,300,000

After 1956 we have taken a constant numerical increase of 500,000 vehicles per year and \$500,000 in revenue per year.

The traffic and revenues are summarized on page 2.

## VI — FUTURE FREEWAY SYSTEM

The Turnpike fits into a system of expressways which will eventually, with a few breaks, furnish a route from Portland, Me. to Washington, D. C., with a connection somewhere in the Philadelphia area to the Pennsylvania Turnpike which will extend the full length of the State of Pennsylvania through Harrisburg and Pittsburgh, and an expressway in Ohio which will carry this system across that state.

The present status of this expressway system is as follows:

The Main Turnpike and the interstate bridge between Kittery, Me. and Portsmouth, N. H. are already in operation. The New Hampshire Turnpike is in course of construction and is expected to be completed in the fall of 1950. There is in prospect an expressway across Massachusetts which will connect the New Hampshire Turnpike with the Wilbur Cross Parkway in Connecticut. The date for completion of this expressway has not been fixed. The Wilbur Cross Parkway between the Massachusetts State line and the Housatonic River is now partly in operation and the link through West Rock south of New Haven is due to be completed by the end of 1949, or in any event, before the New Jersey Turnpike is in operation. Merritt Parkway from Housatonic River to the New York State line is already in operation. In New York, the Hutchinson River Parkway and the Cross County Parkway, in combination with George Washington Bridge, Lincoln Tunnel and Holland Tunnel afford connections between New England and New Jersey. At the south end of the New Jersey Turnpike is the Delaware Memorial Bridge, which is expected to be open by midsummer of 1951. The Chesapeake Bay Bridge is expected to be completed some time during 1952. There may

be some delay, however, on this, as the contracts have not yet been let. A connection from U. S. 13 in Delaware to the Chesapeake Bay Bridge is not yet scheduled by the Maryland State Roads Commission. This entire route may not be completed until 1955, although a portion of the route, which will provide for reasonably good connections, may be completed by 1952. The connection from the Bay Bridge on the west to Route U. S. 301 to the south is expected to be completed by midsummer of 1952.

The eastern extension of the Pennsylvania Turnpike to King of Prussia, just west of Philadelphia, is expected to be completed by the end of 1950 and the western extension to the state line, by fall of 1951. The Pennsylvania Turnpike connection, south of Philadelphia, cannot be started until two years after the opening of the western extension, in other words, until fall of 1953. By midsummer of 1955, this connection should be available. If additional legislation is passed, it may be possible to provide a connection north of Philadelphia to Bordentown with the New Jersey Turnpike. The earliest date at which this could be reasonably expected is by the end of 1953. The Philadelphia expressway from a connection to the Pennsylvania Turnpike is expected to be completed by the end of 1950 and from the city line to Camden Bridge, by the end of 1952.

There is also in course of planning an expressway across New York from Lake Erie near Buffalo, west to Albany and south to Suffern near the New Jersey State line connecting with Route 17 in New Jersey. Completion of this through way is expected by the end of 1952. The Palisades Interstate Parkway in the State of New York extended from a connection with Route 6 is expected to be completed to the New Jersey line to a connection with U. S. 9W by the end of 1951. New Jersey Route 4 Parkway is expected to be completed to a junction with Route 28 near Cranford by fall of 1952 to a connection with Route 29 near Union by the fall of 1953 to the Essex County line by the fall of 1954, and to Route 24, Springfield Avenue by the fall of 1955. Not all of these expressways will have been completed by the fall of 1951 when the New Jersey Turnpike is to be open. As the additional portions of the system are open, particularly the Pennsylvania Turnpike connection with the New Jersey Turnpike at Bordentown and at the connections to Chesapeake Bay Bridge, there will be new accretions of traffic to the Turnpike. On the completion of this system, the Turnpike will be a very important link between New York and New England and the South and New England, and a portion of New York to the West. We have reflected in our estimates in future growth of traffic the incidence of the completion of these various elements in the expressway system. The estimated completion schedule of some of these routes is shown in Appendix V.

The history of motor vehicular transportation in the United States indicates that use of motor vehicles has increased almost in proportion to the increase in improved highways. In our opinion, the availability of an extended system of expressways with restricted access will have a similar stimulating effect on the volume of traffic.

## VII — REVENUE FROM CONCESSIONS

The Turnpike Authority will realize earnings from the concession for the sale of gasoline and other motor fuel, oil, food and miscellaneous merchandise.

We have been informed that gasoline stations with snack bars attached will be provided by the Authority along the Turnpike on the average of every 12 miles and, also, that there will be two large restaurants.

The State of Connecticut, which owns the service stations on Merritt Parkway, receives a royalty of \$.0476 per gallon of gasoline sold in addition to a flat fee of \$500 for each dual station. This is twice the cash royalty the Pennsylvania Turnpike receives from sales of gasoline. However, the stations on its route were built by others and the Turnpike acquires complete title to them after a 25-year period.

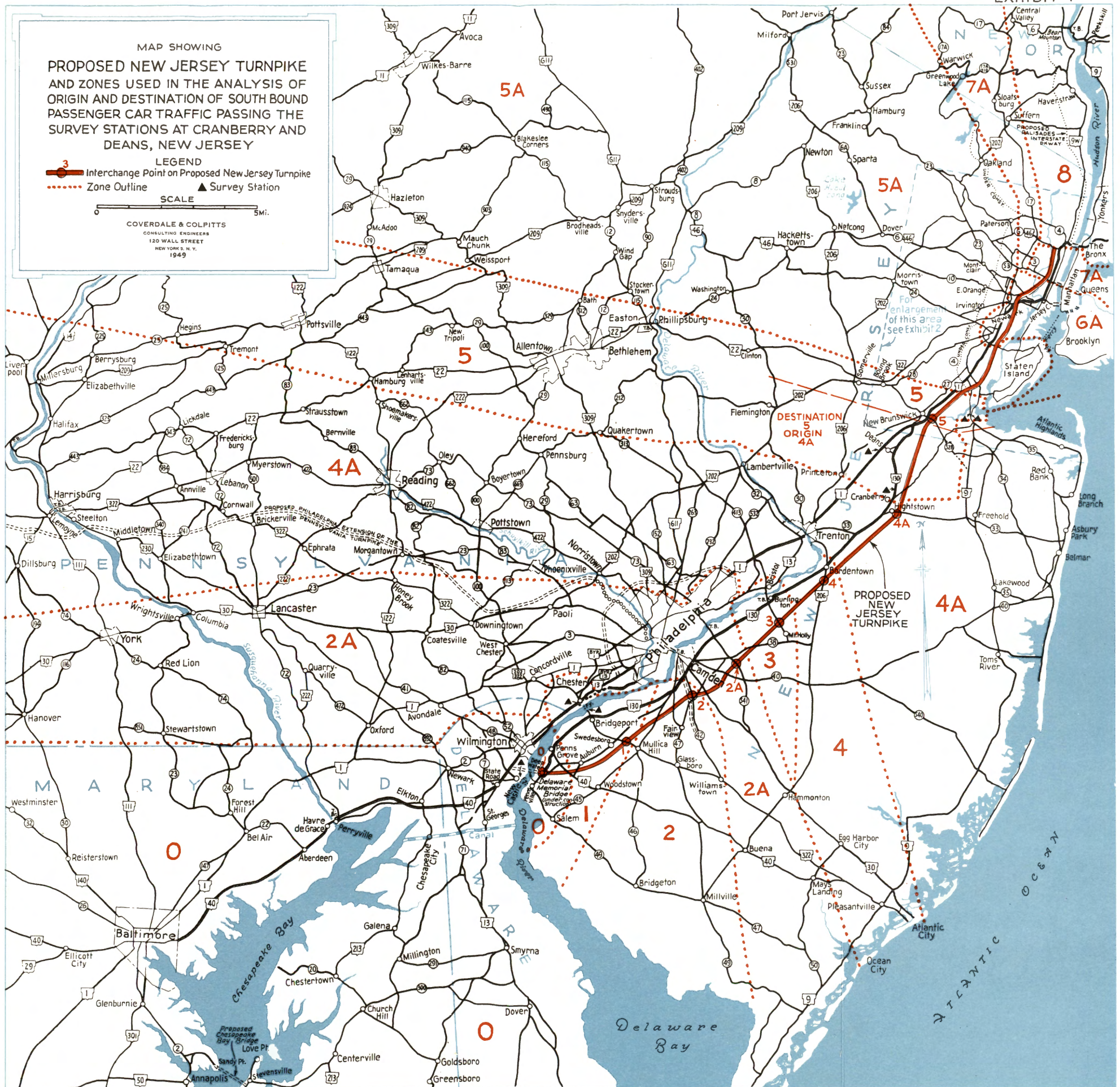
After studying the sales of gasoline on the Pennsylvania Turnpike and Merritt Parkway and taking into consideration that the tax on gasoline in New Jersey is, at present, one cent less than in New York and two cents less than in Pennsylvania, Delaware and Maryland, we estimate that approximately 9,000,000 gallons of gas will be sold the first year of operation of the Turnpike, assuming the gasoline stations are opened the same time as the Turnpike. At a royalty of \$.0476, which we believe reasonable to expect, this would produce a revenue of \$428,400.

We have taken other revenue at 20 per cent of the revenue from gasoline sales, or \$107,100. This ratio of revenue from concessions other than gasoline sales to the revenue from gasoline sales may be on the low side, but as there will be much short distance traffic on the northern section of the Turnpike and, as we believe the estimated revenue from gasoline is liberal, we think it is reasonable. The total revenue from concessions on the above bases is, therefore, \$535,500, which we have rounded to \$536,000. This is equivalent to 7½ per cent of the vehicular revenue.

We have assumed that the ratio of the future revenue from concessions to the future vehicular revenue will remain the same. The total revenue from concessions is summarized on Page 2.

## **EXHIBITS**

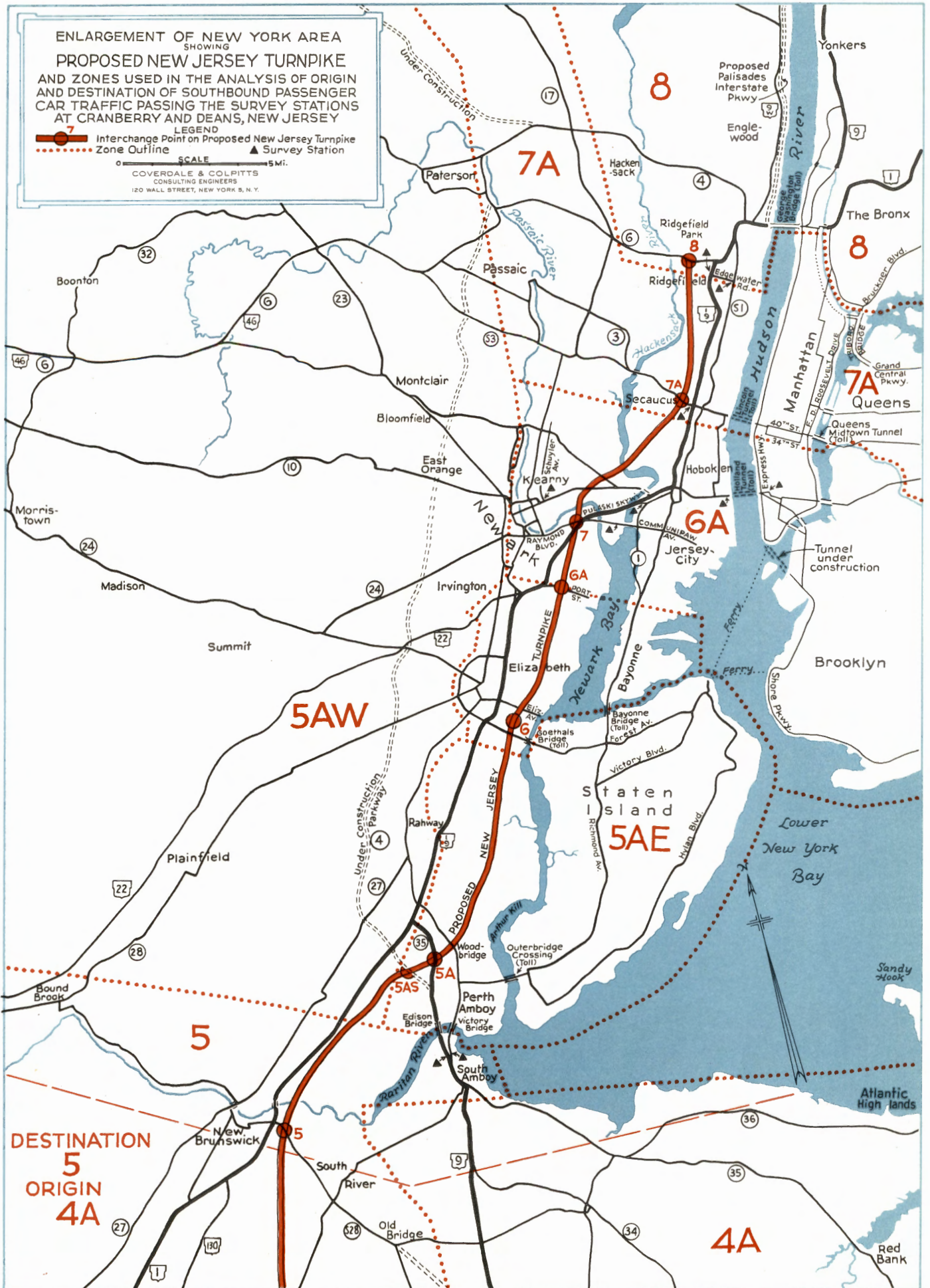
- I Map Showing Proposed New Jersey Turnpike and Zones Used in the Analysis of Origin and Destination of Southbound Passenger Car Traffic Passing the Survey Stations at Cranbury and Deans, New Jersey.
- II Enlargement of New York Area Showing Proposed New Jersey Turnpike and Zones Used in the Analysis of Origin and Destination of Southbound Passenger Car Traffic Passing the Survey Stations at Cranbury and Deans, New Jersey.
- III Chart Showing Growth of Traffic on the Pennsylvania Turnpike and on Certain Facilities in the Vicinity of the Proposed New Jersey Turnpike.
- IV Map — New Jersey Turnpike Showing Relation to Present and Future Highway System.



ENLARGEMENT OF NEW YORK AREA  
SHOWING  
PROPOSED NEW JERSEY TURNPIKE  
AND ZONES USED IN THE ANALYSIS OF ORIGIN  
AND DESTINATION OF SOUTHBOUND PASSENGER  
CAR TRAFFIC PASSING THE SURVEY STATIONS  
AT CRANBERRY AND DEANS, NEW JERSEY

LEGEND  
● Interchange Point on Proposed New Jersey Turnpike  
- - - Zone Outline ▲ Survey Station

SCALE 0 5 Mi.  
COVERDALE & GOLPITTS  
CONSULTING ENGINEERS  
120 WALL STREET, NEW YORK 5, N.Y.



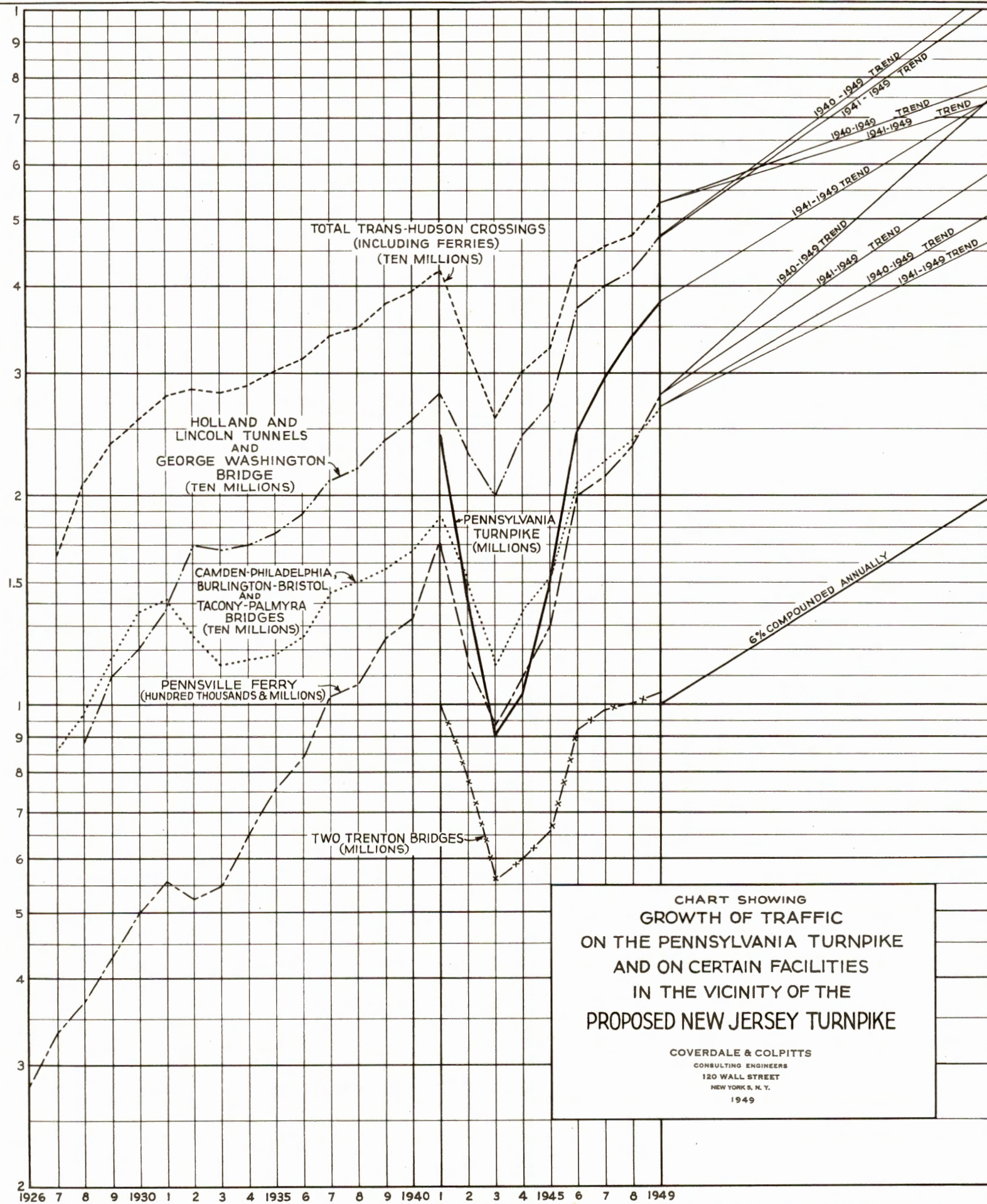
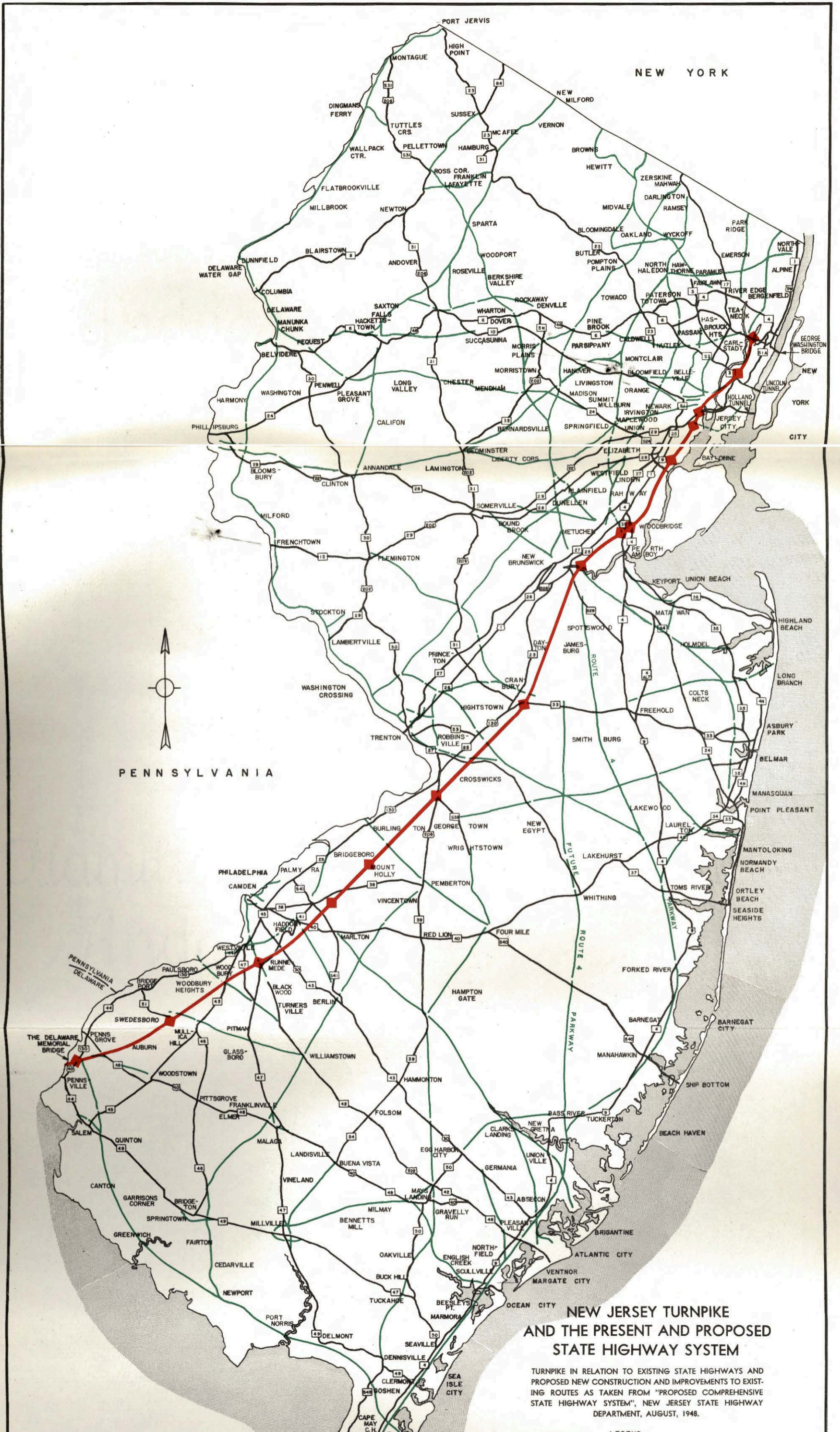


CHART SHOWING  
 GROWTH OF TRAFFIC  
 ON THE PENNSYLVANIA TURNPIKE  
 AND ON CERTAIN FACILITIES  
 IN THE VICINITY OF THE  
 PROPOSED NEW JERSEY TURNPIKE

COVERDALE & COLPITTS  
 CONSULTING ENGINEERS  
 120 WALL STREET  
 NEW YORK 5, N. Y.  
 1949



**NEW JERSEY TURNPIKE  
AND THE PRESENT AND PROPOSED  
STATE HIGHWAY SYSTEM**

TURNPIKE IN RELATION TO EXISTING STATE HIGHWAYS AND PROPOSED NEW CONSTRUCTION AND IMPROVEMENTS TO EXISTING ROUTES AS TAKEN FROM "PROPOSED COMPREHENSIVE STATE HIGHWAY SYSTEM", NEW JERSEY STATE HIGHWAY DEPARTMENT, AUGUST, 1948.

## **APPENDICES**

## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON ROUTE U.S. 130 AT A POINT NORTH OF CRANBURY  
FROM 8AM THURSDAY, JUNE 16 TO 8AM TUESDAY, JUNE 21, 1949

	Vehicles Interviewed and Zoned									Total Inter- viewed	Vehicles Inter- viewed Not Zoned	Total Pass. Cars and Trucks	Volume Count		
	Passenger Cars					Trucks							Pass. Cars and Trucks	Buses and Other Vehicles	Total
	New Jersey	New England	New York	Other	Total	2 Axle	3 Axle Single Unit	3 Axle Semi- Trailer	Total						
<b>NORTHBOUND</b>															
Thursday, 6/16 (8AM-12M)	1,223	144	522	993	2,882	364	154	727	1,245	4,127	132	4,259	4,240	57	4,297
Tuesday, 6/21 (12M-8AM)	151	20	40	110	321	79	52	511	642	963	58	1,021	1,026	8	1,034
Constructed Thursday	1,374	164	562	1,103	3,203	443	206	1,238	1,887	5,090	190	5,280	5,266	65	5,331
Friday, 6/17	1,760	350	742	1,693	4,545	421	49	1,088	1,558	6,103	214	6,317	6,449	88	6,537
Saturday, 6/18	1,874	203	652	1,618	4,347	208	25	353	586	4,933	275	5,208	5,237	52	5,289
Sunday, 6/19	2,542	239	1,112	1,260	5,153	198	182	491	871	6,024	368	6,392	6,566	87	6,653
Monday, 6/20	1,582	174	654	1,017	3,427	454	95	1,140	1,689	5,116	324	5,440	5,352	68	5,420
Total 5 Days	9,132	1,130	3,722	6,691	20,675	1,724	557	4,310	6,591	27,266	1,371	28,637	28,870	360	29,230
<b>SOUTHBOUND</b>															
Thursday, 6/16 (8AM-12M)	1,088	153	376	583	2,200	405	154	949	1,508	3,708	83	3,791	3,807	54	3,861
Tuesday, 6/21 (12M-8AM)	167	15	78	74	334	123	61	359	543	877	40	917	919	4	923
Constructed Thursday	1,255	168	454	657	2,534	528	215	1,308	2,051	4,585	123	4,708	4,726	58	4,784
Friday, 6/17	1,691	260	819	795	3,565	555	141	1,241	1,937	5,502	227	5,729	5,791	59	5,850
Saturday, 6/18	1,839	275	1,004	593	3,711	191	40	443	674	4,385	298	4,683	4,577	48	4,625
Sunday, 6/19	2,182	263	795	1,231	4,471	169	34	199	402	4,873	228	5,101	5,056	72	5,128
Monday, 6/20	1,619	230	751	1,052	3,652	457	171	1,115	1,743	5,395	318	5,713	5,995	80	6,075
Total 5 Days	8,586	1,196	3,823	4,328	17,933	1,900	601	4,306	6,807	24,740	1,194	25,934	26,145	317	26,462
<b>BOTH DIRECTIONS</b>															
Thursday, 6/16 (8AM-12M)	2,311	297	898	1,576	5,082	769	308	1,676	2,753	7,835	215	8,050	8,047	111	8,158
Tuesday, 6/21 (12M-8AM)	318	35	118	184	655	202	113	870	1,185	1,840	98	1,938	1,945	12	1,957
Constructed Thursday	2,629	332	1,016	1,760	5,737	971	421	2,546	3,938	9,675	313	9,988	9,992	123	10,115
Friday, 6/17	3,451	610	1,561	2,488	8,110	976	190	2,329	3,495	11,605	441	12,046	12,240	147	12,387
Saturday, 6/18	3,713	478	1,656	2,211	8,058	399	65	796	1,260	9,318	573	9,891	9,814	100	9,914
Sunday, 6/19	4,724	502	1,907	2,491	9,624	367	216	690	1,273	10,897	596	11,493	11,622	159	11,781
Monday, 6/20	3,201	404	1,405	2,069	7,079	911	266	2,255	3,432	10,511	642	11,153	11,347	148	11,495
Total 5 Days	17,718	2,326	7,545	11,019	38,608	3,624	1,158	8,616	13,398	52,006	2,565	54,571	55,015	677	55,692

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## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON ROUTE U.S. 1 AT A POINT SOUTH OF THE HIGHWAY LEADING EAST TO DEANS  
FROM 8AM THURSDAY, JUNE 16 TO 8AM TUESDAY JUNE 21, 1949

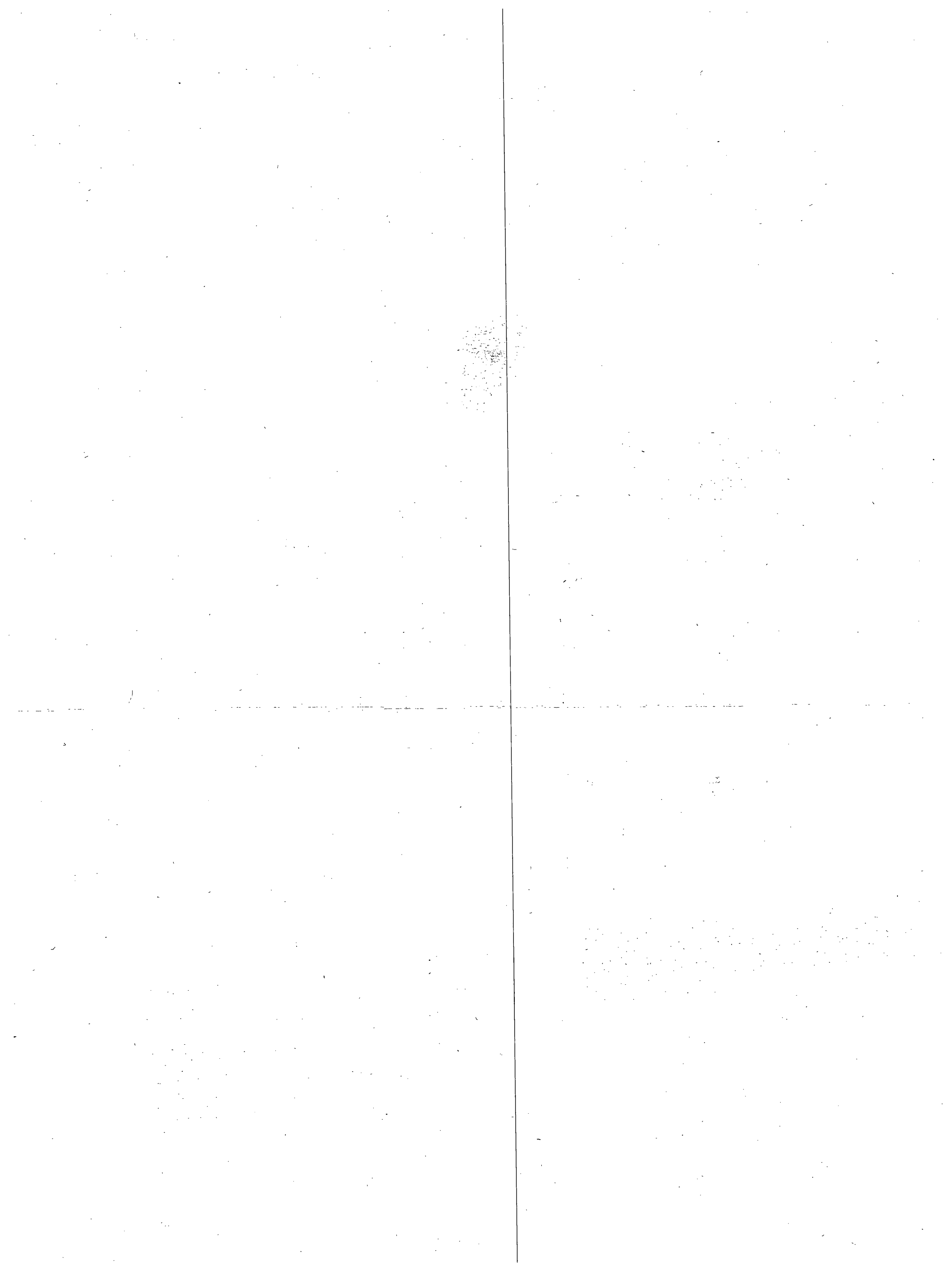
	Vehicles Interviewed and Zoned									Total Inter- viewed	Vehicles Inter- viewed Not Zoned	Total Pass. Cars and Trucks	Volume Count		
	Passenger Cars					Trucks							Pass. Cars and Trucks	Buses and Other Vehicles	Total
	New Jersey	New England	New York	Other	Total	2 Axle	3 Axle Single Unit	3 Axle Semi- Trailer	Total						
<b>NORTHBOUND</b>															
Thursday, 6/16 (8AM-12M)	1,645	158	433	750	2,986	358	59	412	829	3,815	60	3,875	3,986	47	4,033
Tuesday, 6/21 (12M-8AM)	246	27	35	79	387	98	2	407	507	894	35	929	939	17	956
Constructed Thursday	1,891	185	468	829	3,373	456	61	819	1,336	4,709	95	4,804	4,925	64	4,989
Friday, 6/17	2,058	223	580	1,176	4,037	471	73	753	1,297	5,334	113	5,447	5,508	70	5,578
Saturday, 6/18	2,049	211	585	1,496	4,341	241	10	255	506	4,847	133	4,980	5,061	69	5,130
Sunday, 6/19	3,224	267	1,246	1,547	6,284	137	3	74	214	6,498	174	6,672	6,766	124	6,890
Monday, 6/20	1,899	126	563	941	3,529	449	19	847	1,315	4,844	107	4,951	4,799	75	4,874
Total 5 Days	11,121	1,012	3,442	5,989	21,564	1,754	166	2,748	4,668	26,232	622	26,854	27,059	402	27,461
<b>SOUTHBOUND</b>															
Thursday, 6/16 (8AM-12M)	1,735	131	436	875	3,177	432	52	487	971	4,148	97	4,245	4,310	76	4,386
Tuesday, 6/21 (12M-8AM)	268	21	62	90	441	95	12	298	405	846	25	871	813	15	828
Constructed Thursday	2,003	152	498	965	3,618	527	64	785	1,376	4,994	122	5,116	5,123	91	5,214
Friday, 6/17	2,234	266	721	1,062	4,283	513	77	806	1,396	5,679	129	5,808	5,850	126	5,976
Saturday, 6/18	2,178	223	1,071	832	4,304	242	16	335	593	4,897	153	5,050	5,309	100	5,409
Sunday, 6/19	3,357	203	937	2,265	6,762	132	10	48	190	6,952	294	7,246	7,372	137	7,509
Monday, 6/20	2,086	194	682	1,285	4,247	464	49	715	1,228	5,475	199	5,674	5,884	77	5,961
Total 5 Days	11,858	1,038	3,909	6,409	23,214	1,878	216	2,689	4,783	27,997	897	28,894	29,538	531	30,069
<b>BOTH DIRECTIONS</b>															
Thursday, 6/16 (8AM-12M)	3,380	289	869	1,625	6,163	790	111	899	1,800	7,963	157	8,120	8,296	123	8,419
Tuesday, 6/21 (12M-8AM)	514	48	97	169	828	193	14	705	912	1,740	60	1,800	1,752	32	1,784
Constructed Thursday	3,894	337	966	1,794	6,991	983	125	1,604	2,712	9,703	217	9,920	10,048	155	10,203
Friday, 6/17	4,292	489	1,301	2,238	8,320	984	150	1,559	2,693	11,013	242	11,255	11,358	196	11,554
Saturday, 6/18	4,227	434	1,656	2,328	8,645	483	26	590	1,099	9,744	286	10,030	10,370	169	10,539
Sunday, 6/19	6,581	470	2,183	3,812	13,046	269	13	122	404	13,450	468	13,918	14,138	261	14,399
Monday, 6/20	3,985	320	1,245	2,226	7,776	913	68	1,562	2,543	10,319	306	10,625	10,683	152	10,835
Total 5 Days	22,979	2,050	7,351	12,398	44,778	3,632	382	5,437	9,451	54,229	1,519	55,748	56,597	933	57,530

Coverdale & Colpitts  
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120 Wall St., New York

NEW JERSEY TURNPIKEORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON PENNSVILLE FERRY  
FROM 8AM THURSDAY, AUGUST 4 TO 8AM TUESDAY, AUGUST 9, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b><u>EASTBOUND</u></b>											
Thursday, 8/4 (8AM-12M)	2,830	1,941	68.6	912	568	62.3	3,742	2,509	67.0	14	3,756
Tuesday, 8/9 (12M-8AM)	404	275	68.1	271	226	83.4	675	501	74.2	3	678
Constructed Thursday	3,234	2,216	68.5	1,183	794	67.1	4,417	3,010	68.1	17	4,434
Friday, 8/5	4,968	3,307	66.6	946	699	73.9	5,914	4,006	67.7	19	5,933
Saturday, 8/6	5,817	3,915	67.3	590	397	67.3	6,407	4,312	67.3	30	6,437
Sunday, 8/7	5,656	4,099	72.5	678	543	80.1	6,334	4,642	73.3	68	6,402
Monday, 8/8	4,100	2,822	68.8	1,118	818	73.2	5,218	3,640	69.8	16	5,234
Total 5 Days	23,775	16,359	68.8	4,515	3,251	72.0	28,290	19,610	69.3	150	28,440
<b><u>WESTBOUND</u></b>											
Thursday, 8/4 (8AM-12M)	2,566	1,723	67.1	843	531	63.0	3,409	2,254	66.1	19	3,428
Tuesday, 8/9 (12M-8AM)	346	247	71.4	411	316	76.9	757	563	74.4	6	763
Constructed Thursday	2,912	1,970	67.7	1,254	847	67.5	4,166	2,817	67.6	25	4,191
Friday, 8/5	3,762	2,654	70.5	1,127	745	66.1	4,889	3,399	69.5	17	4,906
Saturday, 8/6	4,244	3,234	76.2	674	512	76.0	4,918	3,746	76.2	28	4,946
Sunday, 8/7	6,317	4,388	69.5	393	253	64.4	6,710	4,641	69.2	71	6,781
Monday, 8/8	4,916	3,423	69.6	948	663	69.9	5,864	4,086	69.7	23	5,887
Total 5 Days	22,151	15,669	70.7	4,396	3,020	68.7	26,547	18,689	70.4	164	26,711
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 8/4 (8AM-12M)	5,396	3,664	67.9	1,755	1,099	62.6	7,151	4,763	66.6	33	7,184
Tuesday, 8/9 (12M-8AM)	750	522	69.6	682	542	79.5	1,432	1,064	74.3	9	1,441
Constructed Thursday	6,146	4,186	68.1	2,437	1,641	67.3	8,583	5,827	67.9	42	8,625
Friday, 8/5	8,730	5,961	68.3	2,073	1,444	69.7	10,803	7,405	68.5	36	10,839
Saturday, 8/6	10,061	7,149	71.1	1,264	909	71.9	11,325	8,058	71.2	58	11,383
Sunday, 8/7	11,973	8,487	70.9	1,071	796	74.3	13,044	9,283	71.2	139	13,183
Monday, 8/8	9,016	6,245	69.3	2,066	1,481	71.7	11,082	7,726	69.7	39	11,121
Total 5 Days	45,926	32,028	69.7	8,911	6,271	70.4	54,837	38,299	69.8	314	55,151

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NEW JERSEY TURNPIKEORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON CHESTER FERRY  
FROM 8AM THURSDAY, AUGUST 4 TO 8AM TUESDAY, AUGUST 9, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b><u>EASTBOUND</u></b>											
Thursday, 8/4 (8AM-12M)	1,491	929	62.3	475	294	61.9	1,966	1,223	62.2	1	1,967
Tuesday, 8/9 (12M-8AM)	179	139	77.7	205	175	85.4	384	314	81.8	2	386
Constructed Thursday	1,670	1,068	64.0	680	469	69.0	2,350	1,537	65.4	3	2,353
Friday, 8/5	2,689	2,231	83.0	663	541	81.6	3,352	2,772	82.7	3	3,355
Saturday, 8/6	3,111	2,158	69.4	268	207	77.2	3,379	2,365	70.0	11	3,390
Sunday, 8/7	3,215	2,400	74.7	325	222	68.3	3,540	2,622	74.1	12	3,552
Monday, 8/8	1,757	1,176	66.9	883	512	58.0	2,640	1,688	63.9	2	2,642
Total 5 Days	12,442	9,033	72.6	2,819	1,951	69.2	15,261	10,984	72.0	31	15,292
<b><u>WESTBOUND</u></b>											
Thursday, 8/4 (8AM-12M)	1,321	1,087	82.3	530	439	82.8	1,851	1,526	82.4	3	1,854
Tuesday, 8/9 (12M-8AM)	202	195	96.5	198	188	94.9	400	383	95.8	1	401
Constructed Thursday	1,523	1,282	84.2	728	627	86.1	2,251	1,909	84.8	4	2,255
Friday, 8/5	1,528	1,452	95.0	649	608	93.7	2,177	2,060	94.6	0	2,177
Saturday, 8/6	1,939	1,851	95.5	349	329	94.3	2,288	2,180	95.3	10	2,298
Sunday, 8/7	4,422	3,269	73.9	192	141	73.4	4,614	3,410	73.9	11	4,625
Monday, 8/8	2,308	2,033	88.1	584	541	92.6	2,892	2,574	89.0	5	2,897
Total 5 Days	11,720	9,887	84.4	2,502	2,246	89.8	14,222	12,133	85.3	30	14,252
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 8/4 (8AM-12M)	2,812	2,016	71.7	1,005	733	72.9	3,817	2,749	72.0	4	3,821
Tuesday, 8/9 (12M-8AM)	381	334	87.7	403	363	90.1	784	697	88.9	3	787
Constructed Thursday	3,193	2,350	73.6	1,408	1,096	77.8	4,601	3,446	74.9	7	4,608
Friday, 8/5	4,217	3,683	87.3	1,312	1,149	87.6	5,529	4,832	87.4	3	5,532
Saturday, 8/6	5,050	4,009	79.4	617	536	86.9	5,667	4,545	80.2	21	5,688
Sunday, 8/7	7,637	5,669	74.2	517	363	70.2	8,154	6,032	74.0	23	8,177
Monday, 8/8	4,065	3,209	78.9	1,467	1,053	71.8	5,532	4,262	77.0	7	5,539
Total 5 Days	24,162	18,920	78.3	5,321	4,197	78.9	29,483	23,117	78.4	61	29,544

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## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON ROUTE U.S. 1 AND 9 AT EDGEWATER ROAD (RIDGEFIELD CIRCLE)  
FROM 8AM THURSDAY, JULY 14 TO 8AM TUESDAY, JULY 19, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b><u>NORTHBOUND</u></b>											
Thursday, 7/14 (8AM-12M)	8,711	4,737	54.4	2,285	1,221	53.4	10,996	5,958	54.2	515	11,511
Tuesday, 7/19 (12M-8AM)	1,058	604	57.1	510	352	69.0	1,568	956	61.0	89	1,657
Constructed Thursday	9,769	5,341	54.7	2,795	1,573	56.3	12,564	6,914	55.0	604	13,168
Friday, 7/15	9,997	5,578	55.8	2,794	1,600	57.3	12,791	7,178	56.1	628	13,419
Saturday, 7/16	10,256	5,377	52.4	1,203	691	57.4	11,459	6,068	53.0	523	11,982
Sunday, 7/17	9,357	4,621	49.4	661	305	46.1	10,018	4,926	49.2	489	10,507
Monday, 7/18	9,512	5,329	56.0	2,606	1,329	51.0	12,118	6,658	54.9	627	12,745
Total 5 Days	48,891	26,246	53.7	10,059	5,498	54.7	58,950	31,744	53.8	2,871	61,821
<b><u>SOUTHBOUND</u></b>											
Thursday, 7/14 (8AM-12M)	7,820	4,283	54.8	2,307	1,055	45.7	10,127	5,338	52.7	521	10,648
Tuesday, 7/19 (12M-8AM)	1,757	1,187	67.6	648	471	72.7	2,405	1,658	68.9	125	2,530
Constructed Thursday	9,577	5,470	57.1	2,955	1,526	51.6	12,532	6,996	55.8	646	13,178
Friday, 7/15	9,765	5,879	60.2	2,988	1,453	48.6	12,753	7,332	57.5	616	13,369
Saturday, 7/16	9,793	6,346	64.8	1,237	745	60.2	11,030	7,091	64.3	530	11,560
Sunday, 7/17	10,072	6,168	61.2	502	231	46.0	10,574	6,399	60.5	483	11,057
Monday, 7/18	9,760	7,211	73.9	2,679	1,506	56.2	12,439	8,717	70.1	619	13,058
Total 5 Days	48,967	31,074	63.5	10,361	5,461	52.7	59,328	36,535	61.6	2,894	62,222
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 7/14 (8AM-12M)	16,531	9,020	54.6	4,592	2,276	49.6	21,123	11,296	53.5	1,036	22,159
Tuesday, 7/19 (12M-8AM)	2,815	1,791	63.6	1,158	823	71.1	3,973	2,614	65.8	214	4,187
Constructed Thursday	19,346	10,811	55.8	5,750	3,099	53.9	25,096	13,910	55.4	1,250	26,346
Friday, 7/15	19,762	11,457	58.0	5,782	3,053	52.8	25,544	14,510	56.8	1,244	26,788
Saturday, 7/16	20,049	11,723	58.5	2,440	1,436	58.9	22,489	13,159	58.5	1,053	23,542
Sunday, 7/17	19,429	10,789	55.5	1,163	536	46.1	20,592	11,325	55.0	972	21,564
Monday, 7/18	19,272	12,540	65.1	5,285	2,835	53.6	24,557	15,375	62.6	1,246	25,803
Total 5 Days	97,858	57,320	58.6	20,420	10,959	53.7	118,278	68,279	57.7	5,765	124,043

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120 Wall St., New York

## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON ROUTE N.J. 51 (BERGEN BLVD.) AT EDGEWATER ROAD  
FROM 8AM THURSDAY, JULY 14 TO 8AM TUESDAY, JULY 19, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b><u>NORTHBOUND</u></b>											
Thursday, 7/14 (8AM-12M)	6,705	1,724	25.7	683	240	35.1	7,388	1,964	26.6	69	7,457
Tuesday, 7/19 (12M-8AM)	808	308	38.1	116	32	27.6	924	340	36.8	23	947
Constructed Thursday	7,513	2,032	27.0	799	272	34.0	8,312	2,304	27.8	92	8,404
Friday, 7/15	7,707	2,272	29.5	829	260	31.4	8,536	2,532	29.7	87	8,623
Saturday, 7/16	7,457	2,493	33.4	566	178	31.4	8,023	2,671	33.3	62	8,085
Sunday, 7/17	5,813	1,711	29.4	243	70	28.8	6,056	1,781	29.4	69	6,125
Monday, 7/18	7,086	2,253	31.8	773	235	30.4	7,859	2,488	31.7	92	7,951
Total 5 Days	35,576	10,761	30.2	3,210	1,015	31.6	38,786	11,776	30.4	402	39,188
<b><u>SOUTHBOUND</u></b>											
Thursday, 7/14 (8AM-12M)	5,598	1,646	29.4	685	221	32.3	6,283	1,867	29.7	75	6,358
Tuesday, 7/19 (12M-8AM)	1,138	377	33.1	106	35	33.0	1,244	412	33.2	22	1,266
Constructed Thursday	6,736	2,023	30.0	791	256	32.4	7,527	2,279	30.3	97	7,624
Friday, 7/15	6,932	2,101	30.3	811	269	33.2	7,743	2,370	30.6	99	7,842
Saturday, 7/16	6,839	2,380	34.8	515	183	35.5	7,354	2,563	34.9	70	7,424
Sunday, 7/17	5,318	1,926	36.2	182	66	36.3	5,500	1,992	36.2	65	5,565
Monday, 7/18	7,576	2,585	34.1	748	307	41.0	8,324	2,892	34.8	116	8,440
Total 5 Days	33,401	11,015	33.0	3,047	1,081	35.5	36,448	12,096	33.2	447	36,895
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 7/14 (8AM-12M)	12,303	3,370	27.4	1,368	461	33.7	13,671	3,831	28.0	144	13,815
Tuesday, 7/19 (12M-8AM)	1,946	685	35.2	222	67	30.2	2,168	752	34.7	45	2,213
Constructed Thursday	14,249	4,055	28.5	1,590	528	33.2	15,839	4,583	29.0	189	16,028
Friday, 7/15	14,639	4,373	29.9	1,640	529	32.3	16,279	4,902	30.1	186	16,465
Saturday, 7/16	14,296	4,873	34.1	1,081	361	33.4	15,377	5,234	34.0	132	15,509
Sunday, 7/17	11,131	3,637	32.7	425	136	32.0	11,556	3,773	32.6	134	11,690
Monday, 7/18	14,662	4,838	33.0	1,521	542	35.6	16,183	5,380	33.2	208	16,391
Total 5 Days	68,977	21,776	31.6	6,257	2,096	33.5	75,234	23,872	31.7	849	76,083

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120 Wall St., New York

## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON NORTH AND SOUTHBOUND ENTRANCE RAMP TO LINCOLN TUNNEL  
FROM ROUTE U.S. 1 AND 9 AND ON SOUTHBOUND EXIT RAMP FROM LINCOLN TUNNEL TO ROUTE U.S. 1 AND 9  
FROM 8 AM THURSDAY, AUGUST 4 TO 8 AM TUESDAY, AUGUST 9, 1949

	Passenger Cars								Total		
	New Jersey		New England		New York		Others		Volume Count	Interviewed	
	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed		Number	%
<b><u>NORTHBOUND AND SOUTHBOUND ON ROUTE U.S. 1 AND 9 AND EASTBOUND TO LINCOLN TUNNEL</u></b>											
Thursday, 8/4 (8AM-12M)	2,812	2,561	100	78	1,583	1,218	524	477	5,019	4,334	86.4
Tuesday, 8/9 (12M-8AM)	418	379	9	6	167	139	57	53	651	577	88.6
Constructed Thursday	3,230	2,940	109	84	1,750	1,357	581	530	5,670	4,911	86.6
Friday, 8/5	3,392	3,315	156	127	1,745	1,430	798	728	6,091	5,600	91.9
Saturday, 8/6	3,185	3,056	144	102	1,573	1,319	837	790	5,739	5,267	91.8
Sunday, 8/7	2,738	2,530	183	142	3,063	2,268	737	670	6,721	5,610	83.5
Monday, 8/8	3,372	3,013	159	126	2,665	2,091	731	637	6,927	5,867	84.7
Total 5 Days	15,917	14,854	751	581	10,796	8,465	3,684	3,355	31,148	27,255	87.5
% Interviewed		93.3		77.4		78.4		91.1		87.5	
<b><u>WESTBOUND FROM LINCOLN TUNNEL AND SOUTHBOUND ON ROUTE U.S. 1 AND 9</u></b>											
Thursday, 8/4 (8AM-12M)	2,482	2,231	64	47	1,116	909	450	400	4,112	3,587	87.2
Tuesday, 8/9 (12M-8AM)	466	439	19	12	213	123	50	61	748	635	84.9
Constructed Thursday	2,948	2,670	83	59	1,329	1,032	500	461	4,860	4,222	86.9
Friday, 8/5	3,457	3,321	129	117	2,299	2,024	665	632	6,550	6,094	93.0
Saturday, 8/6	2,967	2,965	133	101	2,014	1,803	486	483	5,600	5,352	95.6
Sunday, 8/7	3,015	2,909	103	97	1,383	1,272	839	778	5,340	5,056	94.7
Monday, 8/8	3,161	3,052	140	115	1,601	1,478	570	564	5,472	5,209	95.2
Total 5 Days	15,548	14,917	588	489	8,626	7,609	3,060	2,918	27,822	25,933	93.2
% Interviewed		95.9		83.2		88.2		95.4		93.2	
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 8/4 (8AM-12M)	5,294	4,792	164	125	2,699	2,127	974	877	9,131	7,921	86.7
Tuesday, 8/9 (12M-8AM)	884	818	28	18	380	262	107	114	1,399	1,212	86.6
Constructed Thursday	6,178	5,610	192	143	3,079	2,389	1,081	991	10,530	9,133	86.7
Friday, 8/5	6,849	6,636	285	244	4,044	3,454	1,463	1,360	12,641	11,694	92.5
Saturday, 8/6	6,152	6,021	277	203	3,587	3,122	1,323	1,273	11,339	10,619	93.6
Sunday, 8/7	5,753	5,439	286	239	4,446	3,540	1,576	1,448	12,061	10,666	88.4
Monday, 8/8	6,533	6,065	299	241	4,266	3,569	1,301	1,201	12,399	11,076	89.3
Total 5 Days	31,465	29,771	1,339	1,070	19,422	16,074	6,744	6,273	58,970	53,188	90.2
% Interviewed		94.6		79.9		82.8		93.0		90.2	

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120 Wall St., New York

## NEW JERSEY TURNPIKE

ORIGIN AND DESTINATION SURVEY ON ROUTE N.J. 3 AT A POINT WEST OF THE EASTBOUND ENTRANCE RAMP TO  
LINCOLN TUNNEL FROM ROUTE U.S. 1 AND 9 AND EAST OF THE CONNECTION OF LINCOLN TUNNEL WITH ROUTE N.J. 3  
FROM 8AM THURSDAY, AUGUST 4 to 8AM TUESDAY, AUGUST 9, 1949

	Passenger Cars								Total		
	New Jersey		New England		New York		Others		Volume Count	Interviewed	
	Volume Count	Inter- viewed	Volume Count	Inter- viewed	Volume Count	Inter- viewed	Volume Count	Inter- viewed		Number	%
<b><u>NORTHBOUND ON ROUTE U.S. 1 AND 9 AND WESTBOUND ON ROUTE N.J. 3</u></b>											
Thursday, 8/4 (8AM-2M)	1,960	960	45	4	362	161	113	40	2,480	1,165	47.0
Tuesday, 8/9 (12M-8AM)	258	110	10		46	20	10	3	324	133	41.0
Constructed Thursday	2,218	1,070	55	4	408	181	123	43	2,804	1,298	46.3
Friday, 8/5	2,490	1,336	23	13	513	260	96	25	3,122	1,634	52.3
Saturday, 8/6	2,340	1,411	17	5	549	293	73	30	2,979	1,739	58.4
Sunday, 8/7	2,815	1,723	28	4	528	230	107	48	3,478	2,005	57.6
Monday, 8/8	1,962	508	24	1	362	178	63	19	2,411	706	29.3
Total 5 Days	11,825	6,048	147	27	2,360	1,142	462	165	14,794	7,382	49.9
% Interviewed		51.1		18.4		48.4		35.7		49.9	
<b><u>EASTBOUND ON ROUTE N.J. 3 AND SOUTHBOUND ON ROUTE U.S. 1 AND 9</u></b>											
Thursday, 8/4 (8AM-12M)	1,963	1,638	57	20	413	305	110	92	2,543	2,055	80.8
Tuesday, 8/9 (12M-8AM)	250	250	4	4	21	8	9	8	284	270	95.1
Constructed Thursday	2,213	1,888	61	24	434	313	119	100	2,827	2,325	82.2
Friday, 8/5	2,086	1,840	39	15	449	323	124	105	2,698	2,283	84.6
Saturday, 8/6	2,109	1,966	19	8	541	430	96	92	2,765	2,496	90.3
Sunday, 8/7	2,389	2,228	22	17	984	807	120	111	3,515	3,163	90.0
Monday, 8/8	1,622	1,546	20	16	661	614	87	74	2,390	2,250	94.1
Total 5 Days	10,419	9,468	161	80	3,069	2,487	546	482	14,195	12,517	88.2
% Interviewed		90.9		49.7		81.0		88.3		88.2	
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 8/4 (8AM-12M)	3,923	2,598	102	24	775	466	223	132	5,023	3,220	64.1
Tuesday 8/9 (12M-8AM)	508	360	14	4	67	28	19	11	608	403	66.3
Constructed Thursday	4,431	2,958	116	28	842	494	242	143	5,631	3,623	64.3
Friday, 8/5	4,576	3,176	62	28	962	583	220	130	5,820	3,917	67.3
Saturday, 8/6	4,449	3,377	36	13	1,090	723	169	122	5,744	4,235	73.7
Sunday, 8/7	5,204	3,951	50	21	1,512	1,037	227	159	6,993	5,168	73.9
Monday, 8/8	3,584	2,054	44	17	1,023	792	150	93	4,801	2,956	61.6
Total 5 Days	22,244	15,516	308	107	5,429	3,629	1,008	647	28,989	19,899	68.6
% Interviewed		69.8		34.7		66.8		64.2		68.6	

Coverdale & Colpitts  
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120 Wall St., New York

NEW JERSEY TURNPIKEORIGIN AND DESTINATION SURVEY AND VOLUME COUNT AT TOLL BOOTHS OF HOLLAND TUNNEL  
FROM 8AM THURSDAY, JULY 28 TO 8AM TUESDAY, AUGUST 2, 1949

	Passenger Cars								Total Passenger Cars			
	New Jersey		New England		New York		Others		Volume Count	Interviewed		
	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed		Number	%	
<b>EASTBOUND</b>												
Thursday, 7/28 (8AM-12M)	4,741	4,407	483	391	5,766	4,963	1,491	1,463	12,481	11,224	89.9	
Tuesday, 8/2 (12M-8AM)	764	646	57	51	755	616	233	208	1,809	1,521	84.1	
Constructed Thursday	5,505	5,053	540	442	6,521	5,579	1,724	1,671	14,290	12,745	89.2	
Friday, 7/29	6,209	5,407	701	519	6,050	4,854	2,573	2,389	15,533	13,169	84.8	
Saturday, 7/30	6,710	6,085	684	570	6,391	5,149	3,417	3,301	17,202	15,105	87.8	
Sunday, 7/31	6,291	5,540	779	603	11,904	8,866	2,931	2,656	21,905	17,665	80.6	
Monday, 8/1	5,300	4,514	641	555	9,506	7,463	2,459	2,279	17,906	14,811	82.7	
Total 5 Days	30,015	26,599	3,345	2,689	40,372	31,911	13,104	12,296	86,836	73,495	84.6	
% Interviewed		88.6		80.4		79.0		93.8				
<b>WESTBOUND</b>												
Thursday, 7/28 (8AM-12M)	4,977	3,941	394	293	5,453	4,393	1,877	1,509	12,701	10,136	79.8	
Tuesday, 8/2 (12M-8AM)	758	679	86	63	1,515	1,203	358	218	2,717	2,163	79.6	
Constructed Thursday	5,735	4,620	480	356	6,968	5,596	2,235	1,727	15,418	12,299	79.8	
Friday, 7/29	5,572	4,484	772	504	9,976	7,503	2,354	1,915	18,674	14,406	77.1	
Saturday, 7/30	5,566	4,625	1,175	828	11,435	9,515	2,404	2,139	20,580	17,107	83.1	
Sunday, 7/31	8,368	6,496	907	667	8,140	6,789	3,429	2,769	20,844	16,721	80.2	
Monday, 8/1	6,544	5,369	857	669	7,801	6,289	2,579	2,229	17,781	14,556	81.9	
Total 5 Days	31,785	25,594	4,191	3,024	44,320	35,692	13,001	10,779	93,297	75,089	80.5	
% Interviewed		80.5		72.2		80.5		82.9				
<b>BOTH DIRECTIONS</b>												
Thursday, 7/28 (8AM-12M)	9,718	8,348	877	684	11,219	9,356	3,368	2,972	25,182	21,360	84.8	
Tuesday, 8/2 (12M-8AM)	1,522	1,325	143	114	2,270	1,819	591	426	4,526	3,684	81.4	
Constructed Thursday	11,240	9,673	1,020	798	13,489	11,175	3,959	3,398	29,708	25,044	84.3	
Friday, 7/29	11,781	9,891	1,473	1,023	16,026	12,357	4,927	4,304	34,207	27,575	80.6	
Saturday, 7/30	12,276	10,710	1,859	1,398	17,826	14,664	5,821	5,440	37,782	32,212	85.3	
Sunday, 7/31	14,659	12,036	1,686	1,270	20,044	15,655	6,360	5,425	42,749	34,386	80.4	
Monday, 8/1	11,844	9,883	1,498	1,224	17,307	13,752	5,038	4,508	35,687	29,367	82.3	
Total 5 Days	61,800	52,193	7,536	5,713	84,692	67,603	26,105	23,075	180,133	148,584	82.5	
% Interviewed		84.5		75.8		79.8		88.4				

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120 Wall St., New York

## NEWARK BAY BRIDGE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON COMMUNIPAW AVENUE AT HACKENSACK AVENUE  
FROM 8AM THURSDAY, JULY 21 TO 8AM TUESDAY, JULY 26, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b>EASTBOUND</b>											
Thursday, 7/21 (8AM-12M)	6,341	1,837	29.0	6,795	1,894	27.9	13,136	3,731	28.4	209	13,345
Tuesday, 7/26 (12M-8AM)	964	222	23.0	1,693	396	23.4	2,657	618	23.3	59	2,716
Constructed Thursday	7,305	2,059	28.2	8,488	2,290	27.0	15,793	4,349	27.5	268	16,061
Friday, 7/22	6,485	1,733	26.7	8,565	2,360	27.6	15,050	4,093	27.2	252	15,302
Saturday, 7/23	6,450	2,004	31.1	2,639	767	29.1	9,089	2,771	30.5	236	9,325
Sunday, 7/24	8,793	3,859	43.9	1,715	747	43.6	10,508	4,606	43.8	250	10,758
Monday, 7/25	6,991	1,910	27.3	8,508	2,660	31.3	15,499	4,570	29.5	244	15,743
Total 5 Days	36,024	11,565	32.1	29,915	8,824	29.5	65,939	20,389	30.9	1,250	67,189
<b>WESTBOUND</b>											
Thursday, 7/21 (8AM-12M)	5,275	881	16.7	5,682	788	13.9	10,957	1,669	15.2	182	11,139
Tuesday, 7/26 (12M-8AM)	1,323	225	17.0	1,267	232	18.3	2,590	457	17.6	60	2,650
Constructed Thursday	6,598	1,106	16.8	6,949	1,020	14.7	13,547	2,126	15.7	242	13,789
Friday, 7/22	6,913	1,339	19.4	8,308	1,741	21.0	15,221	3,080	20.2	261	15,482
Saturday, 7/23	6,817	2,015	29.6	2,722	642	23.6	9,539	2,657	27.9	251	9,790
Sunday, 7/24	6,849	3,918	57.2	1,052	475	45.2	7,901	4,393	55.6	231	8,132
Monday, 7/25	6,222	1,492	24.0	8,102	1,947	24.0	14,324	3,439	24.0	242	14,566
Total 5 Days	33,399	9,870	29.6	27,133	5,825	21.5	60,532	15,695	25.9	1,227	61,759
<b>BOTH DIRECTIONS</b>											
Thursday, 7/21 (8AM-12M)	11,616	2,718	23.4	12,477	2,682	21.5	24,093	5,400	22.4	391	24,484
Tuesday, 7/26 (12M-8AM)	2,287	447	19.5	2,960	628	21.2	5,247	1,075	20.5	119	5,366
Constructed Thursday	13,903	3,165	22.8	15,437	3,310	21.4	29,340	6,475	22.1	510	29,850
Friday, 7/22	13,398	3,072	22.9	16,873	4,101	24.3	30,271	7,173	23.7	513	30,784
Saturday, 7/23	13,267	4,019	30.3	5,361	1,409	26.3	18,628	5,428	29.1	487	19,115
Sunday, 7/24	15,642	7,777	49.7	2,767	1,222	44.2	18,409	8,999	48.9	481	18,890
Monday, 7/25	13,213	3,402	25.7	16,610	4,607	27.7	29,823	8,009	26.9	486	30,309
Total 5 Days	69,423	21,435	30.9	57,048	14,649	25.7	126,471	36,084	28.5	2,477	128,948

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120 Wall St., New York

NEWARK BAY BRIDGEORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON NEWARK TURNPIKE AT SCHUYLER AVENUE  
FROM 8AM THURSDAY, JULY 21 TO 8AM TUESDAY, JULY 26, 1949

	Passenger Cars			Trucks			Total Passenger Cars and Trucks			Buses	Total Volume Count
	Volume Count	Interviewed		Volume Count	Interviewed		Volume Count	Interviewed			
		Number	%		Number	%		Number	%		
<b><u>EASTBOUND</u></b>											
Thursday, 7/21 (8AM-12M)	2,665	962	36.1	1,207	506	41.9	3,872	1,468	37.9	106	3,978
Tuesday, 7/26 (12M-8AM)	723	309	42.7	269	149	55.4	992	458	46.2	47	1,039
Constructed Thursday	3,388	1,271	37.5	1,476	655	44.4	4,864	1,926	39.6	153	5,017
Friday, 7/22	3,353	935	27.9	1,600	637	39.8	4,953	1,572	31.7	146	5,099
Saturday, 7/23	2,498	757	30.3	486	226	46.5	2,984	983	32.9	120	3,104
Sunday, 7/24	2,759	878	31.8	152	76	50.0	2,911	954	32.8	105	3,016
Monday, 7/25	3,566	1,137	31.9	1,664	710	42.7	5,230	1,847	35.3	141	5,371
Total 5 Days	15,564	4,978	32.0	5,378	2,304	42.8	20,942	7,282	34.8	665	21,607
<b><u>WESTBOUND</u></b>											
Thursday, 7/21 (8AM-12M)	1,786	538	30.1	2,831	841	29.7	4,617	1,379	29.9	153	4,770
Tuesday, 7/26 (12M-8AM)	562	213	37.9	205	75	36.6	767	288	37.5	47	814
Constructed Thursday	2,348	751	32.0	3,036	916	30.2	5,384	1,667	31.0	200	5,584
Friday, 7/22	2,832	607	21.4	2,499	728	29.1	5,331	1,335	25.0	193	5,524
Saturday, 7/23	2,279	680	29.8	525	182	34.7	2,804	862	30.7	162	2,966
Sunday, 7/24	1,911	456	23.9	150	57	38.0	2,061	513	24.9	153	2,214
Monday, 7/25	2,423	695	28.7	2,337	952	40.7	4,760	1,647	34.6	182	4,942
Total 5 Days	11,793	3,189	27.0	8,547	2,835	33.2	20,340	6,024	29.6	890	21,230
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 7/21 (8AM-12M)	4,451	1,500	33.7	4,038	1,347	33.4	8,489	2,847	33.5	259	8,748
Tuesday, 7/26 (12M-8AM)	1,285	522	40.6	474	224	47.3	1,759	746	42.4	94	1,853
Constructed Thursday	5,736	2,022	35.3	4,512	1,571	34.8	10,248	3,593	35.1	353	10,601
Friday, 7/22	6,185	1,542	24.9	4,099	1,365	33.3	10,284	2,907	28.3	339	10,623
Saturday, 7/23	4,777	1,437	30.1	1,011	408	40.4	5,788	1,845	31.9	282	6,070
Sunday, 7/24	4,670	1,334	28.6	302	133	44.0	4,972	1,467	29.5	258	5,230
Monday, 7/25	5,989	1,832	30.6	4,001	1,662	41.5	9,990	3,494	35.0	323	10,313
Total 5 Days	27,357	8,167	29.9	13,925	5,139	36.9	41,282	13,306	32.2	1,555	42,837

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120 Wall St., New York

## NEWARK BAY BRIDGE

ORIGIN AND DESTINATION SURVEY AND VOLUME COUNT ON RAMP CONNECTING THE  
PULASKI SKYWAY WITH NEWARK AVENUE, JERSEY CITY  
FROM 8 AM THURSDAY, JULY 21 TO 8AM TUESDAY, JULY 26, 1949

	Passenger Cars								Total Passenger Cars		
	New Jersey		New England		New York		Others		Volume Count	Interviewed	
	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed	Volume Count	Inter-viewed		Number	%
<b><u>EASTBOUND</u></b>											
Thursday, 7/21 (8AM-12M)	1,977	1,738	10	6	92	70	68	68	2,147	1,882	87.7
Tuesday, 7/26 (12M-8AM)	371	340	2	1	10	5	6	3	389	349	89.7
Constructed Thursday	2,348	2,078	12	7	102	75	74	71	2,536	2,231	88.0
Friday, 7/22	2,754	2,455	15	6	116	96	85	81	2,970	2,638	88.8
Saturday, 7/23	1,259	1,221	16	16	75	71	89	87	1,439	1,395	96.9
Sunday, 7/24	1,195	1,145	12	9	122	111	75	75	1,404	1,340	95.4
Monday, 7/25	3,086	2,809	11	11	133	116	100	98	3,330	3,034	91.1
Total 5 Days	10,642	9,708	66	49	548	469	423	412	11,679	10,638	91.1
% Interviewed		91.2		74.2		85.6		97.4		91.1	
<b><u>WESTBOUND</u></b>											
Thursday, 7/21 (8AM-12M)	2,157	2,003	6	6	71	59	70	51	2,304	2,119	92.0
Tuesday, 7/26 (12M-8AM)	460	428			9	9	7	3	476	440	92.4
Constructed Thursday	2,617	2,431	6	6	80	68	77	54	2,780	2,559	92.0
Friday, 7/22	2,753	2,618	11	6	107	96	70	58	2,941	2,778	94.5
Saturday, 7/23	1,570	1,498	9	8	74	65	44	44	1,697	1,615	95.2
Sunday, 7/24	1,187	1,163	10	8	45	40	59	52	1,301	1,263	97.1
Monday, 7/25	2,585	2,475	16	9	72	72	67	54	2,740	2,610	95.3
Total 5 Days	10,712	10,185	52	37	378	341	317	262	11,459	10,825	94.5
% Interviewed		95.1		71.2		90.2		82.6		94.5	
<b><u>BOTH DIRECTIONS</u></b>											
Thursday, 7/21 (8AM-12M)	4,134	3,741	16	12	163	129	138	119	4,451	4,001	89.9
Tuesday, 7/26 (12M-8AM)	831	768	2	1	19	14	13	6	865	789	91.2
Constructed Thursday	4,965	4,509	18	13	182	143	151	125	5,316	4,790	90.1
Friday, 7/22	5,507	5,073	26	12	223	192	155	139	5,911	5,416	91.6
Saturday, 7/23	2,829	2,719	25	24	149	136	133	131	3,136	3,010	96.0
Sunday, 7/24	2,382	2,308	22	17	167	151	134	127	2,705	2,603	96.2
Monday, 7/25	5,671	5,284	27	20	205	188	167	152	6,070	5,644	93.0
Total 5 Days	21,354	19,893	118	86	926	810	740	674	23,138	21,463	92.8
% Interviewed		93.2		72.9		87.5		91.1		92.8	

Coverdale & Colpitts  
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120 Wall St., New York

NEW JERSEY TURNPIKE  
TOTAL VEHICLES USING EDISON BRIDGE  
FROM 8AM THURSDAY, JULY 7 TO 8AM TUESDAY, JULY 12, 1949

	Passenger Cars				Trucks	Total Vehicles
	New Jersey	New York	Others	Total Passenger Cars		
<b><u>NORTHBOUND</u></b>						
Thursday, 7/7 (8AM-12M)	11,930	1,235	787	13,952	1,497	15,449
Tuesday, 7/12 (12M-8AM)	2,437	163	50	2,650	334	2,984
Constructed Thursday	14,367	1,398	837	16,602	1,831	18,433
Friday, 7/8	14,475	1,543	813	16,831	1,692	18,523
Saturday, 7/9	19,331	2,208	893	22,432	996	23,428
Sunday, 7/10	23,248	4,100	988	28,336	831	29,167
Monday, 7/11	19,737	2,705	754	23,196	1,765	24,961
Total 5 Days	91,158	11,954	4,285	107,397	7,115	114,512
<b><u>SOUTHBOUND</u></b>						
Thursday, 7/7 (8AM-12M)	12,576	1,343	672	14,591	1,436	16,027
Tuesday, 7/12 (12M-8AM)	1,358	104	67	1,529	284	1,813
Constructed Thursday	13,934	1,447	739	16,120	1,720	17,840
Friday, 7/8	20,632	2,974	797	24,403	1,860	26,263
Saturday, 7/9	26,009	3,408	832	30,249	996	31,245
Sunday, 7/10	15,724	2,072	735	18,531	553	19,084
Monday, 7/11	13,503	1,667	734	15,904	1,542	17,446
Total 5 Days	89,802	11,568	3,837	105,207	6,671	111,878
<b><u>BOTH DIRECTIONS</u></b>						
Thursday, 7/7 (8AM-12M)	24,506	2,578	1,459	28,543	2,933	31,476
Tuesday, 7/12 (12M-8AM)	3,795	267	117	4,179	618	4,797
Constructed Thursday	28,301	2,845	1,576	32,722	3,551	36,273
Friday, 7/8	35,107	4,517	1,610	41,234	3,552	44,786
Saturday, 7/9	45,340	5,616	1,725	52,681	1,992	54,673
Sunday, 7/10	38,972	6,172	1,723	46,867	1,384	48,251
Monday, 7/11	33,240	4,372	1,488	39,100	3,307	42,407
Total 5 Days	180,960	23,522	8,122	212,604	13,786	226,390

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKETOTAL VEHICLES USING VICTORY BRIDGE  
FROM 8AM THURSDAY, JULY 7 TO 8AM TUESDAY, JULY 12, 1949

	Passenger Cars				Trucks	Total Vehicles
	New Jersey	New York	Others	Total Passenger Cars		
<b><u>NORTHBOUND</u></b>						
Thursday, 7/7 (8AM-12M)	4,657	461	144	5,262	597	5,859
Tuesday, 7/12 (12M-8AM)	736	24	2	762	70	832
Constructed Thursday	5,393	485	146	6,024	667	6,691
Friday, 7/8	5,787	456	149	6,392	692	7,084
Saturday, 7/9	7,179	700	153	8,032	450	8,482
Sunday, 7/10	9,231	1,136	150	10,517	182	10,699
Monday, 7/11	5,767	612	143	6,522	582	7,104
Total 5 Days	33,357	3,389	741	37,487	2,573	40,060
<b><u>SOUTHBOUND</u></b>						
Thursday, 7/7 (8AM-12M)	5,491	515	145	6,151	669	6,820
Tuesday, 7/12 (12M-8AM)	437	40	7	484	98	582
Constructed Thursday	5,928	555	152	6,635	767	7,402
Friday, 7/8	7,898	823	171	8,892	1,115	10,007
Saturday, 7/9	10,442	1,351	214	12,007	619	12,626
Sunday, 7/10	5,481	726	155	6,362	172	6,534
Monday, 7/11	5,558	603	159	6,320	593	6,913
Total 5 Days	35,307	4,058	851	40,216	3,266	43,482
<b><u>BOTH DIRECTIONS</u></b>						
Thursday, 7/7 (8AM-12M)	10,148	976	289	11,413	1,266	12,679
Tuesday, 7/12 (12M-8AM)	1,173	64	9	1,246	168	1,414
Constructed Thursday	11,321	1,040	298	12,659	1,434	14,093
Friday, 7/8	13,685	1,279	320	15,284	1,807	17,091
Saturday, 7/9	17,621	2,051	367	20,039	1,069	21,108
Sunday, 7/10	14,712	1,862	305	16,879	354	17,233
Monday, 7/11	11,325	1,215	302	12,842	1,175	14,017
Total 5 Days	68,664	7,447	1,592	77,703	5,839	83,542

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR PASSENGER CARS BETWEEN ZONES BY ROUTE U.S. 130 AND THE TURNPIKE TOGETHER WITH PER CENT OF PASSENGER CARS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone	By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rate	% Diverted		
		Distance Miles	Time		Distance Miles	Time		Distance Miles	Time			New Jersey	New York	Others
			Hrs.	Min.		Hrs.	Min.		Hrs.	Min.				
Zone 0 Deepwater	Swedesboro 1	19.17		24.8	13.4		19.7	-5.8		-5.1	\$0.15			
	South Camden 2	29.40		34.5	30.1		47.9	0.7		13.4	0.30	22	23	25
	North Camden 2A	36.20		40.6	32.3		51.6	-3.9		11.0	0.40	30	33	35
	Mt. Holly 3	48.10		54.6	47.8	1	13.9	-0.3		19.3	0.50	39	42	45
	Bordentown 4	54.91	1	0.9	57.7	1	27.0	2.8		26.1	0.60	43	47	50
	Hightstown 4A	68.23	1	15.0	71.0	1	44.9	2.8		29.9	0.75	47	51	55
	New Brunswick 5	84.67	1	33.6	89.2	2	09.3	4.5		35.7	0.90	53	58	62
	Route 4 Parkway 5A So.	90.0	1	38.1	96.6	2	19.8	6.6		41.7	1.00	58	62	67
	Route 35 5A	93.44	1	43.9	98.1	2	23.1	4.7		39.2	1.10	58	62	67
	Elizabeth 6	101.8	1	52.5	105.6	2	37.1	3.8		44.6	1.30	60	65	70
	Port Street 6A	106.1	1	56.9	111.4	2	48.8	5.3		51.9	1.50	65	70	75
	Raymond Blvd. 7	108.7	2	00.1	114.2	2	53.6	5.5		53.5	1.60	65	70	75
	Route 3 7A	115.0	2	06.7	120.2	3	06.7	5.2		60.0	1.75	65	70	75
	Route 6 8	118.2	2	09.7	125.9	3	19.8	7.7	1	10.1	1.75	65	70	75
Zone 1 Swedesboro	South Camden 2	22.46		30.7	16.7		28.2	-5.8		-2.5	0.15			
	North Camden 2A	29.26		36.8	18.9		31.9	-10.4		-4.9	0.25			
	Mt. Holly 3	41.16		50.8	34.4		54.2	-6.8		4.2	0.35	17	19	20
	Bordentown 4	47.97		57.1	44.3	1	07.3	-3.7		10.2	0.45	26	28	30
	Hightstown 4A	61.29	1	11.2	57.6	1	25.2	-3.7		14.0	0.60	34	37	40
	New Brunswick 5	77.73	1	29.8	75.8	1	49.6	-1.9		19.8	0.75	43	47	50
	Route 4 Parkway 5A So.	83.06	1	34.3	83.2	2	00.1	0.1		25.8	0.85	52	57	60
	Route 35 5A	86.50	1	40.1	84.7	2	03.4	-1.8		23.3	0.95	52	57	60
	Elizabeth 6	94.86	1	48.7	92.2	2	17.4	-2.7		28.7	1.15	56	60	65
	Port Street 6A	99.16	1	53.1	98.0	2	29.1	-1.2		36.0	1.35	60	65	70
	Raymond Blvd. 7	101.76	1	56.3	100.8	2	33.9	-1.0		37.6	1.45	60	65	70
Route 3 7A	106.66	2	02.9	106.8	2	47.0	0.1		44.1	1.65	65	70	75	
Route 6 8	111.30	2	05.9	112.5	3	0.1	1.2		54.2	1.75	65	70	75	
Zone 2 South Camden	North Camden 2A	11.42		15.0	2.2		3.7	-9.2		-11.3	0.10			
	Mt. Holly 3	23.32		29.0	17.7		26.0	-5.6		-3.0	0.20			
	Bordentown 4	30.13		35.3	27.6		39.1	-2.5		3.8	0.30	17	19	20
	Hightstown 4A	43.45		49.4	40.9		57.0	-2.6		7.6	0.45	26	28	30
	New Brunswick 5	59.89	1	08.0	59.1	1	21.4	-0.8		13.4	0.60	34	37	40
	Route 4 Parkway 5A So.	65.22	1	12.5	66.5	1	31.9	1.3		19.4	0.70	43	47	50
	Route 35 5A	68.66	1	18.3	68.0	1	35.2	-0.7		16.9	0.80	43	47	50
	Elizabeth 6	77.02	1	26.9	75.5	1	49.2	-1.5		22.3	1.00	52	57	60
	Port Street 6A	81.32	1	31.3	81.3	2	0.9			29.6	1.20	56	60	65
	Raymond Blvd. 7	83.92	1	34.5	84.1	2	5.7	0.2		31.2	1.30	56	60	65
Route 3 7A	90.22	1	41.1	90.1	2	18.8	-0.1		37.7	1.50	60	65	70	
Route 6 8	94.42	1	44.1	95.8	2	31.9	1.4		47.8	1.70	65	70	75	

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR PASSENGER CARS BETWEEN ZONES BY ROUTE U.S. 130 AND THE TURNPIKE  
TOGETHER WITH PER CENT OF PASSENGER CARS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone	By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rate	% Diverted			
		Distance Miles	Time		Distance Miles	Time		Distance Miles	Time			New Jersey	New York	Others	
			Hrs.	Min.		Hrs.	Min.		Hrs.	Min.					
Zone 2A North Camden	Mt. Holly	3	21.0		29.6	15.5		22.3	-5.5		-7.3	\$0.10			
	Bordentown	4	27.8		35.9	25.4		35.4	-2.4		-0.5	0.20			
	Hightstown	4A	41.13		50.0	38.7		53.3	-2.4		3.3	0.35	17	19	20
	New Brunswick	5	57.57	1	08.6	56.9	1	17.7	-0.7		9.1	0.50	26	28	30
	Route 4 Parkway	5A So.	62.90	1	13.1	64.3	1	28.2	1.4		15.1	0.60	34	37	40
	Route 35	5A	66.34	1	18.9	65.8	1	31.5	-0.5		12.6	0.70	34	37	40
	Elizabeth	6	74.70	1	27.5	73.3	1	45.5	-1.4		18.0	0.90	43	47	50
	Port Street	6A	79.00	1	31.5	79.1	1	57.2	0.1		25.7	1.10	52	56	60
	Raymond Blvd.	7	81.60	1	35.1	81.9	2	02.0	0.3		26.9	1.20	52	56	60
Route 3	7A	87.90	1	41.7	87.9	2	15.1			33.4	1.40	56	60	65	
Route 6	8	91.14	1	44.7	93.6	2	28.2	2.5		43.5	1.60	60	65	70	
Zone 3 Mt. Holly	Bordentown	4	13.8		18.3	9.9		13.1	-3.9		-5.2	0.10			
	Hightstown	4A	27.13		32.4	23.2		31.0	-3.9		-1.4	0.25	4	5	5
	New Brunswick	5	43.57		51.0	41.4		55.4	-2.2		4.4	0.40	17	19	20
	Route 4 Parkway	5A So.	48.90		55.5	48.8	1	05.9	-0.1		10.4	0.50	26	28	30
	Route 35	5A	52.34	1	01.3	50.3	1	09.2	-2.0		7.9	0.60	26	28	30
	Elizabeth	6	60.70	1	09.9	57.8	1	23.2	-2.9		13.3	0.80	34	37	40
	Port Street	6A	65.00	1	14.3	63.6	1	34.9	-1.4		20.6	1.00	52	56	60
	Raymond Blvd.	7	67.60	1	17.5	66.4	1	39.7	-1.2		22.2	1.10	52	56	60
	Route 3	7A	73.90	1	24.1	72.4	1	52.8	-1.5		28.7	1.30	56	60	65
Route 6	8	77.14	1	27.1	78.1	2	5.9	1.0		38.8	1.50	60	65	70	
Zone 4 Bordentown	Hightstown	4A	15.65		19.1	13.3		17.9	-2.3		-1.2	0.15			
	New Brunswick	5	32.09		37.7	31.5		42.3	-0.6		4.6	0.30	17	19	20
	Route 4 Parkway	5A So.	37.42		42.2	38.9		52.8	1.5		10.6	0.40	22	23	25
	Route 35	5A	40.86		48.0	40.4		56.1	-0.5		8.1	0.50	22	23	25
	Elizabeth	6	49.22		56.6	47.9	1	10.1	-1.3		13.5	0.70	34	37	40
	Port Street	6A	53.52	1	01.0	53.7	1	21.8	0.2		20.8	0.90	52	56	60
	Raymond Blvd.	7	56.12	1	04.2	56.5	1	26.6	0.4		22.4	1.00	52	56	60
	Route 3	7A	62.42	1	10.8	62.5	1	39.7	0.1		28.9	1.20	56	60	65
Route 6	8	65.66	1	13.8	68.2	1	52.8	2.5		39.0	1.40	60	65	70	
Zone 4A Hightstown	New Brunswick	5	19.27		23.9	18.2		24.4	-1.1		0.5	0.15			
	Route 4 Parkway	5A So.	24.60		28.4	25.6		34.9	1.0		6.5	0.25	17	19	20
	Route 35	5A	28.04		34.2	27.1		38.2	-0.9		4.0	0.35	17	19	20
	Elizabeth	6	36.40		42.8	34.6		52.2	-1.8		9.4	0.55	30	33	35
	Port Street	6A	40.70		47.2	40.4	1	3.9	-0.3		16.7	0.75	43	47	50
	Raymond Blvd.	7	43.30		50.4	43.2	1	8.7	-0.1		18.3	0.85	43	47	50
	Route 3	7A	49.60		57.0	49.2	1	21.8	-0.4		24.8	1.05	56	60	65
Route 6	8	52.84	1	00.0	54.9	1	34.9	2.1		34.9	1.25	60	65	70	

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR PASSENGER CARS BETWEEN ZONES BY ROUTE U.S. 130 AND THE TURNPIKE  
TOGETHER WITH PER CENT OF PASSENGER CARS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone	By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rate	% Diverted		
		Distance Miles	Time		Distance Miles	Time		Distance Miles	Time			New Jersey	New York	Others
			Hrs.	Min.		Hrs.	Min.		Hrs.	Min.				
Zone 5 New Brunswick	Route 4 Parkway 5A So.	8.54		10.9	7.4		10.5	-1.1		-0.4	\$0.10			
	Route 35 5A	11.98		16.7	8.9		13.8	-3.0		-2.9	0.20			
	Elizabeth 6	20.34		25.3	16.4		27.8	-3.9		2.5	0.40	9	9	10
	Port Street 6A	24.64		29.7	22.2		39.5	-2.4		9.8	0.60	34	37	40
	Raymond Blvd. 7	27.24		32.9	25.0		44.3	-2.2		11.4	0.70	34	37	40
	Route 3 7A	33.53		39.5	31.0		57.4	-2.5		17.9	0.90	52	56	60
	Route 6 8	36.78		42.5	36.7	1	10.5			28.0	1.10	60	65	70
Zone 5A So. Route 4 Parkway	Route 35 5A	4.6		8.2	1.5		3.3	-3.1		-4.9	0.10			
	Elizabeth 6	13.0		16.8	9.0		17.3	-4.0		0.5	0.30			
	Port Street 6A	17.3		21.2	14.8		29.0	-2.5		7.8	0.50			
	Raymond Blvd. 7	19.9		24.4	17.6		33.8	-2.3		9.4	0.60			
	Route 3 7A	26.2		31.0	23.6		46.9	-2.6		15.9	0.80			
	Route 6 8	29.4		34.0	29.3	1	00.0	-0.1		24.0	1.00			
Zone 5A Route 35	Elizabeth 6	11.26		14.4	9.1		17.2	-2.2		2.8	0.20	5		
	Port Street 6A	15.56		18.8	14.9		28.9	-0.6		10.1	0.40	21	23	25
	Raymond Blvd. 7	18.16		22.0	17.7		33.7	-0.5		11.7	0.50	17	19	20
	Route 3 7A	24.45		28.6	23.7		43.8	-0.8		15.2	0.70	39	42	45
	Route 6 8	27.70		31.6	29.4		59.9	1.7		28.3	0.90	56	60	65
Zone 6 Elizabeth	Port Street 6A	7.6		11.0	5.8		11.7	-1.8		0.7	0.20	3	4	5
	Raymond Blvd. 7	10.20		14.2	8.6		16.5	-1.6		2.3	0.30	2	2	2
	Route 3 7A	16.50		20.8	14.6		29.6	-1.9		8.8	0.50	39	42	45
	Route 6 8	19.74		23.8	20.3		42.7	0.6		18.9	0.70	56	60	65
Zone 6A Port Street	Raymond Blvd. 7	4.10		6.8	2.8		4.8	-1.3		-2.0	0.10			
	Route 3 7A	10.39		13.4	8.8		17.9	-1.6		4.5	0.30	34	37	40
	Route 6 8	13.64		16.4	14.5		31.0	0.9		14.6	0.50	54	59	63
Zone 7 Raymond Blvd.	Route 3 7A	8.21		11.2	6.0		13.1	-2.2		1.9	0.20	30	33	35
	Route 6 8	11.40		14.2	11.7		26.2	0.3		12.0	0.40	52	56	60
Zone 7A Route 3	Route 6 8	6.0		8.6	5.7		13.1	-0.3		4.5	0.20	17	19	20

Coverdale & Colpitts  
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NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL PASSENGER CAR MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF CARS DIVERTED TO THE TURNPIKE, THE TOLL  
BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	New Jersey Passenger Cars			New York Passenger Cars			New England Passenger Cars			Other Passenger Cars			Total Passenger Cars			Toll	Revenue
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted		
Pennsville	0-1	16,188			456			228			8,132			25,004			\$0.15	\$
Pennsville	0-2	42,522	22	9,355	1,786	23	411	608	25	152	41,192	25	10,298	86,108	23	20,216	0.30	6,065
Pennsville	0-2A	7,372	30	2,212	722	33	238	342	35	120	17,024	35	5,958	25,460	33	8,528	0.40	3,411
Pennsville	0-3	5,548	39	2,164	304	42	128	114	45	51	5,852	45	2,633	11,818	42	4,976	0.50	2,488
Pennsville	0-4	22,838	43	9,820	1,178	47	554	912	50	456	16,454	50	8,227	41,382	46	19,057	0.60	11,434
Pennsville	0-4A	17,252	47	8,108	2,128	51	1,085	570	55	314	35,112	55	19,312	55,062	52	28,819	0.75	21,614
Deans	0-4A	191									957			1,148				
Cranbury	0-5	13,680	53	7,250	243	58	141	244	62	151	11,058	62	6,856	25,225	57	14,398	0.90	12,958
Deans	0-5	4,404	43	1,894	286	47	134	48	50	24	11,601	50	5,801	16,339	48	7,853	0.90	7,068
Cranbury	0-5A	58,797	58	34,102	17,472	62	10,833	1,217	67	815	39,938	67	26,758	117,424	62	72,508	1.10	79,759
Deans	0-5A	10,486	47	4,928	2,440	51	1,244	429	55	236	12,005	55	6,603	25,360	51	13,011	1.10	14,312
Cranbury	0-6	7,738	60	4,643	1,411	65	917		70		6,721	70	4,705	15,870	65	10,265	1.30	13,345
Deans	0-6	1,245	47	585	96	51	49		55		1,436	55	790	2,777	51	1,424	1.30	1,851
Cranbury	0-6A	31,789	65	20,663	52,237	70	36,566	2,094	75	1,571	81,535	75	61,151	167,655	72	119,951	1.50	179,927
Deans	0-6A	4,836	52	2,515	13,779	57	7,854	1,342	60	805	32,581	60	19,548	52,538	58	30,722	1.50	46,083
Cranbury	0-7A	10,904	65	7,088	100,868	70	70,608	4,334	75	3,251	151,563	75	113,672	267,669	73	194,619	1.75	340,583
Deans	0-7A	2,155	56	1,207	24,360	60	14,616	621	65	404	65,750	65	42,738	92,886	63	58,965	1.75	103,189
Cranbury	0-8	15,972	65	10,382	59,344	70	41,541	94,624	75	70,968	203,341	75	152,506	373,281	74	275,397	1.75	481,945
Deans	0-8	2,249	60	1,349	12,871	65	8,366	25,432	70	17,802	70,705	70	49,494	111,257	69	77,011	1.75	134,769
Total		276,166		128,265	291,981		195,285	133,159		97,120	812,957		537,050	1,514,263		957,720		1,460,801
Chester	1-2	37,420			636			368			33,266			71,690			0.15	
Chester	1-2A	5,059			301			34			11,324			16,718			0.25	
Chester	1-3	2,949	17	501	134	19	25	100	20	20	2,044	20	409	5,227	18	955	0.35	334
Chester	1-4	5,662	26	1,472	33	28	9				6,800	30	2,040	12,495	28	3,521	0.45	1,584
Chester	1-4A	4,523	34	1,538	803	37	297	301	40	120	11,490	40	4,596	17,117	38	6,551	0.60	3,931
Deans	1-4A	48												48				
Cranbury	1-5	2,386	43	1,026	49	47	23				1,413	50	707	3,848	46	1,756	0.75	1,317
Deans	1-5	238	22	52										238	22	52	0.75	39
Cranbury	1-5A	7,352	52	3,823	1,995	57	1,137	194	60	116	4,871	60	2,923	14,412	55	7,999	0.95	7,599
Deans	1-5A	575	26	150	192	28	54				813	30	244	1,580	28	448	0.95	426
Cranbury	1-6	2,144	56	1,201	438	60	263				1,316	65	855	3,898	59	2,319	1.15	2,667
Deans	1-6	334	26	87										334	26	87	1.15	100
Cranbury	1-6A	4,381	60	2,629	4,773	65	3,102	98	70	69	8,426	70	5,898	17,678	66	11,698	1.35	15,792
Deans	1-6A	287	30	86	238	33	79	143	35	50	1,197	35	419	1,865	34	634	1.35	856
Cranbury	1-7A	1,754	65	1,140	7,742	70	5,419	244	75	183	13,056	75	9,792	22,796	73	16,534	1.65	27,281
Deans	1-7A	96	34	33	910	37	337	95	40	38	1,053	40	421	2,154	38	829	1.65	1,368
Cranbury	1-8	2,872	65	1,867	4,044	70	2,831	5,308	75	3,981	18,320	75	13,740	30,544	73	22,419	1.75	39,233
Deans	1-8	143	43	67	143	47	67	382	50	191	1,532	50	766	2,057	50	1,024	1.75	1,792
Total		78,080		15,605	22,431		13,643	7,267		4,768	116,921		42,810	224,699		76,826		104,319

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL PASSENGER CAR MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF CARS DIVERTED TO THE TURNPIKE, THE TOLL  
BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	New Jersey Passenger Cars			New York Passenger Cars			New England Passenger Cars			Other Passenger Cars			Total Passenger Cars			Toll	Revenue
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted		
Cranbury	2-4A	828	26	215									828	26	215	\$0.45	\$ 97	
Deans	2-4A	430											430					
Cranbury	2-5	9,932	34	3,377	49	37	18				389	40	156	10,370	34	3,551	0.60	2,131
Deans	2-5	861	10	86									861	10	86	0.60	52	
Cranbury	2-5A	31,741	43	13,649	1,606	47	755	98	50	49	682	50	341	34,127	43	14,794	0.80	11,835
Deans	2-5A	1,677	26	435	96	28	27							1,773	26	463	0.80	370
Cranbury	2-6	4,188	52	2,178	194	57	111				146		88	4,528	52	2,377	1.00	2,377
Deans	2-6	144	30	43	48	33	16							192	31	59	1.00	59
Cranbury	2-6A	24,538	56	13,741	8,473	60	5,084	633	65	411	1,460	65	949	35,104	57	20,185	1.20	24,222
Deans	2-6A	1,148	34	390	48	37	18	48	40	19	144	40	58	1,388	35	485	1.20	582
Cranbury	2-7A	13,484	60	8,090	11,537	65	7,499	49	70	34	5,250	70	3,675	30,320	64	19,298	1.50	28,947
Deans	2-7A	480	34	163	622	37	230							1,102	38	393	1.50	590
Cranbury	2-8	13,535	65	8,798	5,354	70	3,748	3,115	75	2,336	1,314	75	986	23,318	68	15,868	1.70	26,976
Deans	2-8	1,053	43	453	288	47	135	287	50	144	288	50	144	1,916	47	876	1.70	1,489
	Total	104,039		51,619	28,315		17,641	4,230		2,993	9,673		6,397	146,257		78,650		99,727
Cranbury	2A-4A	2,285	17	388							2,530	20	506	4,815	19	894	0.35	313
Deans	2A-4A	1,911			96			238			2,343			4,588				
Cranbury	2A-5	30,333	26	7,887	780	28	218	341	30	102	6,532	30	1,960	37,986	27	10,167	0.50	5,084
Deans	2A-5	25,356			2,920			1,430			25,613			55,319				
Cranbury	2A-5A	82,375	34	28,008	8,618	37	3,189	293	40	117	14,807	40	5,923	106,093	35	37,237	0.70	26,066
Deans	2A-5A	69,460			12,436			4,005			51,198			137,099				
Cranbury	2A-6	11,928	43	5,129	779	47	366	146	50	73	3,556	50	1,778	16,409	45	7,346	0.90	6,611
Deans	2A-6	11,579			1,054			477			9,615			22,725				
Cranbury	2A-6A	66,604	52	34,634	32,328	56	18,104	537	60	322	30,238	60	18,143	129,707	55	71,203	1.10	78,323
Deans	2A-6A	47,405	8	3,792	70,368	9	6,333	8,389	10	839	118,746	10	11,875	244,908	9	22,839	1.10	25,123
Cranbury	2A-7A	25,318	56	14,178	43,823	60	26,294	1,170	65	761	32,634	65	21,212	102,945	61	62,445	1.40	87,423
Deans	2A-7A	12,156	8	972	95,876	9	8,629	5,629	10	563	139,325	10	13,933	252,986	8	24,097	1.40	33,736
Cranbury	2A-8	34,379	60	20,627	21,276	65	13,829	16,260	70	11,382	28,050	70	19,635	99,965	65	65,473	1.60	104,757
Deans	2A-8	15,025	10	1,503	50,420	13	6,555	51,385	15	7,708	113,946	15	17,092	230,776	14	32,858	1.60	52,573
	Total	436,114		117,118	340,774		83,517	90,300		21,867	579,133		112,057	1,446,321		334,559		420,009
Cranbury	3-4A	1,119	4	45										1,119	4	45	0.25	11
Deans	3-4A	382			48						96			526				
Cranbury	3-5	9,739	17	1,656							487	20	97	10,226	17	1,753	0.40	701
Deans	3-5	3,015			48						1,627			4,690				
Cranbury	3-5A	21,473	26	5,583	1,120	28	314	49	30	15	536	30	161	23,178	26	6,073	0.60	3,644
Deans	3-5A	4,260			573			96			1,719			6,648				
Cranbury	3-6	2,727	34	927										2,727	34	927	0.80	742
Deans	3-6	716			48						143			907				
Cranbury	3-6A	13,880	52	7,218	3,698	56	2,071	97	60	58	1,071	60	643	18,746	53	9,990	1.00	9,990
Deans	3-6A	1,389			908			143			1,914			4,354				
Cranbury	3-7A	4,920	56	2,755	3,312	60	1,987	97	65	63	828	65	538	9,157	58	5,343	1.30	6,946
Deans	3-7A	670			1,579						909			3,158				
Cranbury	3-8	6,817	60	4,090	1,948	65	1,266	1,266	70	886	633	70	443	10,664	63	6,685	1.50	10,028
Deans	3-8	383	8	31	478	9	43	190	10	19	1,531	10	153	2,582	8	246	1.50	369
	Total	71,490		22,305	13,760		5,681	1,938		1,041	11,494		2,035	98,382		31,062		32,431

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL PASSENGER CAR MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF CARS DIVERTED TO THE TURNPIKE, THE TOLL  
BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	New Jersey Passenger Cars			New York Passenger Cars			New England Passenger Cars			Other Passenger Cars			Total Passenger Cars			Toll	Revenue
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted		
Cranbury	4-4A	778									146			924			\$0.15	
Deans	4-4A	335												335				
Cranbury	4-5	14,214	17	2,416	146	19	28	196	20	39	828	20	166	15,384	17	2,649	0.30	\$ 795
Deans	4-5	3,353			48						48			3,449				
Cranbury	4-5A	23,172	22	5,098	1,364	23	314	291	25	73	292	25	73	25,119	22	5,558	0.50	2,779
Deans	4-5A	2,632			96						143			2,871				
Cranbury	4-6	5,258	34	1,788										5,258	34	1,788	0.70	1,252
Deans	4-6	622												622				
Cranbury	4-6A	18,642	52	9,694	5,257	56	2,944	244	60	146	974	60	584	25,117	53	13,368	0.90	12,031
Deans	4-6A	1,821			430						336			2,587				
Cranbury	4-7A	7,937	56	4,445	9,741	60	5,845	195	65	127	1,509	65	981	19,382	59	11,398	1.20	13,678
Deans	4-7A	480			717						143			1,340				
Cranbury	4-8	5,794	60	3,476	5,209	65	3,386	3,259	70	2,281	1,606	70	1,124	15,868	65	10,267	1.40	14,374
Deans	4-8	527	8	42	238	9	21	1,099	10	110	287	10	28	2,151		201	1.40	281
	Total	85,565		26,959	23,246		12,538	5,284		2,776	6,312		2,956	120,407		45,229		45,190
Cranbury	4A-5	103,074			1,170			98			3,945			108,287			0.15	
Deans	4A-5	258,747			2,390			621			13,543			275,301			0.15	
Cranbury	4A-5A	43,869	17	7,458	4,426	19	841	98	20	20	2,528	20	506	50,921	17	8,825	0.35	3,089
Deans	4A-5A	218,414			10,523			1,242			12,199			242,378			0.35	
Cranbury	4A-6	7,400	30	2,220	146	33	48				97	35	34	7,643	30	2,302	0.55	1,266
Deans	4A-6	35,104			526						2,009			37,639			0.55	
Cranbury	4A-6A	37,395	43	16,080	14,215	47	6,681	487	50	244	5,012	50	2,506	57,109	45	25,511	0.75	19,133
Deans	4A-6A	157,131			32,102			1,724			15,021			205,978			0.75	
Cranbury	4A-7A	13,151	56	7,365	11,154	60	6,692	730	65	475	3,846	65	2,500	28,881	59	17,032	1.05	17,884
Deans	4A-7A	41,556			37,789			1,243			15,019			95,607			1.05	
Cranbury	4A-8	12,905	60	7,743	7,839	65	5,095	4,822	70	3,375	4,919	70	3,443	30,485	64	19,656	1.25	24,570
Deans	4A-8	37,296	8	2,984	24,015	9	2,161	15,604	10	1,560	14,150	10	1,415	91,065	9	8,120	1.25	10,150
	Total	966,042		43,850	146,295		21,518	26,669		5,674	92,288		10,404	1,231,294		81,446		76,092

Coverdale & Colpitts  
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120 Wall St., New York

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL PASSENGER CAR MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF CARS DIVERTED TO THE TURNPIKE, THE TOLL  
BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	New Jersey Passenger Cars			New York Passenger Cars			New England Passenger Cars			Other Passenger Cars			Total Passenger Cars			Toll	Revenue
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted		
Cranbury	5-5A	14,853			1,363			293			293			16,802				
Deans	5-5A	49,901			4,211			431			1,673			56,216				
Cranbury	5-6	1,656	9	149	49	9	4		10			10	1,705	9	153	\$0.40	\$ 61	
Deans	5-6	10,866	9	978	239	9	22				528	10	11,633	9	1,053	0.40	421	
Deans	5-6			4,321			146			48				5,691		0.46	2,276	
Edison Bridge	5-6	708,813	2	14,484									708,813	2	14,484	0.40	5,794	
Victory Bridge	5-6	195,693	3	4,946									195,693	3	4,946	0.40	1,978	
Holland Tunnel	5-6A	111,741	34	37,992	126,174	37	46,684	12,342	40	4,937	11,526	40	4,610	261,783	36	94,223	0.60	56,534
Deans	5-6A			64,956			32,086			3,271			42,592		142,905	0.60	85,743	
Edison Bridge	5-6A	1,251,626	9	107,418	54,495	5	2,584				45,000	5	2,240	1,351,121	8	112,242	0.60	67,345
Victory Bridge	5-6A	278,513	11	29,565	13,776	5	677				13,500		673	305,789	10	30,915	0.60	18,549
Lincoln Tunnel	5-7A	54,444	52	28,311	30,524	56	17,093	2,964	60	1,778	3,172	60	1,903	91,104	54	49,085	0.90	44,177
Deans	5-7A			27,659			67,801			3,580			79,516		178,556	0.90	160,700	
Edison Bridge	5-7A	620,588	16	98,913	347,792	9	30,120				45,000	9	4,033	1,013,380	13	133,066	0.90	119,759
Victory Bridge	5-7A	82,369	20	16,238	137,145	9	12,314				13,500	9	1,212	233,014	13	29,764	0.90	26,788
Ridgefield	5-8	47,424	60	28,454	10,036	65	6,523	4,056	70	2,839	1,768	70	1,238	63,284	62	39,054	1.10	42,959
Deans	5-8			27,558			40,159			38,530			72,615		178,862	1.10	196,748	
Edison Bridge	5-8	289,365	23	66,224	317,268	12	39,252	93,792	10	9,379	92,625	13	11,990	793,050	16	126,845	1.10	139,530
Victory Bridge	5-8	26,814	28	7,590	74,333	13	9,534	17,045	10	1,705	27,497	13	3,565	145,689	15	22,394	1.10	24,633
Total		3,744,666		565,756	1,117,405		304,999	130,923		66,067	256,082		227,416	5,249,076		1,164,238		993,995
Edison Bridge	5A-6			20,957											20,957	0.20	4,191	
Victory Bridge	5A-6			4,839											4,839	0.20	968	
Edison Bridge	5A-6A			123,423			9,950						9,010		142,383	0.40	56,953	
Victory Bridge	5A-6A			28,923			2,491						2,702		34,116	0.40	13,646	
Edison Bridge	5A-7A			143,116			115,953						16,217		275,286	0.80	220,229	
Victory Bridge	5A-7A			15,886			45,287						4,863		66,036	0.80	52,829	
Edison Bridge	5A-8			127,820			151,109			38,586			48,216		365,731	0.90	329,158	
Victory Bridge	5A-8			7,426			35,066			9,374			14,308		66,174	0.90	59,557	
Total				472,390			359,856			47,960			95,316		975,522		737,531	
Holland Tunnel	6-6A	70,125	3	2,104	57,375	4	2,295	3,111	5	156	3,417	5	171	134,028	4	4,726	0.20	945
Lincoln Tunnel	6-7A	179,972	39	70,189	72,800	42	30,576	4,940	45	2,223	7,800	45	3,510	265,512	40	106,498	0.50	53,249
Ridgefield	6-8	150,280	56	84,157	94,068	60	56,441	4,576	65	2,974	5,200	65	3,380	254,124	59	146,952	0.70	102,866
Total		400,377		156,450	224,243		89,312	12,627		5,353	16,417		7,061	653,664		258,176		157,060
Lincoln Tunnel	6A-7A	369,096	34	125,493	211,952	37	78,422	13,624	40	5,450	122,304	40	48,922	716,976	36	258,287	0.30	77,486
Ridgefield	6A-8	188,448	52	97,993	31,616	56	17,705	11,284	63	7,109	11,596	63	7,305	242,944	54	130,112	0.50	65,056
Total		557,544		223,486	243,568		96,127	24,908		12,559	133,900		56,227	959,920		388,399		142,542
Lincoln Tunnel	7-7A	703,924	30	211,177	279,084	33	92,098	19,032	35	6,661	28,600	35	10,010	1,030,640	31	319,946	0.20	63,989
Ridgefield	7-8	382,980	52	199,150	79,352	57	45,231	13,104	60	7,862	16,692	60	10,015	492,128	53	262,258	0.40	104,903
Total		1,086,904		410,327	358,436		137,329	32,136		14,523	45,292		20,025	1,522,768		582,204		168,892
Ridgefield	7A-8	3,746,600	17	636,922	479,284	19	91,064	32,812	20	6,562	55,328	20	11,066	4,314,024	17	745,614	0.20	149,122
GRAND TOTAL		11,553,587		2,871,052	3,289,738		1,428,510	502,253		289,263	2,135,797		1,130,820	17,481,375		5,719,645		4,587,711

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR TRUCKS BETWEEN COMMON POINTS OF ZONES BY ROUTE U.S. 130 AND THE TURNPIKE  
TOGETHER WITH PER CENT OF TRUCKS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone	By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rates			% Diverted	
		Distance Miles	Time		Distance Miles	Time		Distance Miles	Time		2 Axle	3 Axle Single Unit	Semi-Trailer		
			Hrs.	Min.		Hrs.	Min.		Hrs.	Min.					
Zone 0 Deepwater	Swedesboro 1	19.2		27.9	13.4		20.4	-5.8		-7.5	\$0.25	\$0.30	\$0.40	0	
	South Camden 2	29.4		38.4	30.1		55.3	0.7		16.9	0.50	0.60	0.80	0	
	North Camden 2A	36.2		44.9	32.3	1	01.2	-3.9		16.3	0.65	0.80	1.05	0	
	Mt. Holly 3	48.1		60.5	47.8	1	26.2	-0.3		25.7	0.80	1.00	1.30	5	
	Bordentown 4	54.9	1	07.1	57.7	1	41.2	2.8		34.1	0.95	1.20	1.55	7	
	Hightstown 4A	68.2	1	22.8	71.0	2	01.7	2.8		38.9	1.20	1.50	1.95	8	
	New Brunswick 5	84.7	1	43.3	89.2	2	29.5	4.5		46.2	1.45	1.80	2.35	15	
	Route 35 5A	93.4	1	54.8	98.1	2	44.8	4.7		50.0	1.60	2.00	2.60	17	
	Elizabeth 6	101.8	2	04.2	105.6	3	00.6	3.8		56.4	2.05	2.60	3.35	25	
	Port Street 6A	106.1	2	08.9	111.4	3	14.6	5.3	1	05.7	2.35	3.00	3.85	30	
	Route 3 7A	115.0	2	19.6	121.3	3	40.0	6.3	1	20.4	2.80	3.60	4.50	50	
	Route 6 8	118.2	2	22.8	127.0	3	52.0	8.8	1	29.2	3.10	4.00	4.50	60	
	Zone 1 Swedesboro	South Camden 2	22.5		34.9	16.7		34.9	-5.8			0.25	0.30	0.40	0
North Camden 2A		29.3		41.4	18.9		40.8	-10.4		-0.6	0.40	0.50	0.65	0	
Mt. Holly 3		41.2		57.0	34.4	1	05.8	-6.8		8.8	0.55	0.70	0.90	0	
Bordentown 4		48.0	1	03.6	44.3	1	21.1	-3.7		17.5	0.70	0.90	1.15	5	
Hightstown 4A		61.3	1	19.3	57.6	1	41.3	-3.7		22.0	0.95	1.20	1.55	5	
New Brunswick 5		77.7	1	39.8	75.8	2	09.1	-1.9		29.3	1.20	1.50	1.95	7	
Route 35 5A		86.5	1	51.3	84.7	2	24.4	-1.8		33.1	1.35	1.70	2.20	10	
Elizabeth 6		94.9	2	00.7	92.2	2	40.2	-2.7		39.5	1.80	2.30	2.95	10	
Port Street 6A		99.2	2	05.4	98.0	2	54.2	-1.2		48.8	2.10	2.70	3.45	15	
Route 3 7A		106.7	2	16.1	107.9	3	19.6	1.2	1	03.5	2.55	3.30	4.20	35	
Route 6 8		111.3	2	19.3	113.6	3	31.6	2.3	1	12.3	2.85	3.70	4.50	50	
Zone 2 South Camden		North Camden 2A	11.4		17.2	2.2		05.9	-9.2		-11.3	0.15	0.20	0.25	0
		Mt. Holly 3	23.3		32.8	17.7		30.9	-5.6		-1.9	0.30	0.40	0.50	0
	Bordentown 4	30.1		39.4	27.6		46.2	-2.5		6.8	0.45	0.60	0.75	0	
	Hightstown 4A	43.5		55.1	40.9	1	06.2	-2.6		11.1	0.70	0.90	1.15	0	
	New Brunswick 5	59.9	1	15.6	59.1	1	34.2	-0.8		18.6	0.95	1.20	1.55	0	
	Route 35 5A	68.7	1	27.1	68.0	1	49.5	-0.7		22.4	1.25	1.60	2.05	5	
	Elizabeth 6	77.0	1	36.5	75.5	2	05.3	-1.5		28.8	1.55	2.00	2.55	7	
	Port Street 6A	81.3	1	41.2	81.3	2	19.3			38.1	1.85	2.40	3.05	10	
	Route 3 7A	90.2	1	51.9	91.2	2	44.7	1.0		52.8	2.30	3.00	3.80	30	
	Route 6 8	93.4	1	55.1	96.9	2	56.7	3.5	1	01.6	2.60	3.40	4.30	40	

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR TRUCKS BETWEEN COMMON POINTS OF ZONES BY ROUTE U.S. 130 AND THE TURNPIKE  
TOGETHER WITH PER CENT OF TRUCKS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone		By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rates			% Diverted
			Distance Miles	Time		Distance Miles	Time		Distance Miles	Time		2 Axle	3 Axle Single Unit	Semi-Trailer	
				Hrs.	Min.		Hrs.	Min.		Hrs.	Min.				
Zone 2A North Camden	Mt. Holly	3	21.0		33.8	15.5		25.0	-5.5		-8.8	\$0.30	\$0.40	\$0.50	0
	Bordentown	4	27.8		40.4	25.4		40.3	-2.4		-0.1	0.30	0.40	0.50	0
	Hightstown	4A	41.1		56.1	38.7	1	00.5	-2.4		4.4	0.55	0.70	0.90	0
	New Brunswick	5	57.6	1	16.6	56.9	1	28.3	-0.7		11.7	0.80	1.00	1.30	0
	Route 35	5A	66.3	1	28.8	65.8	1	43.6	-0.5		14.8	1.10	1.40	1.80	0
	Elizabeth	6	74.7	1	37.5	73.3	1	59.4	-1.4		21.9	1.40	1.80	2.30	5
	Port Street	6A	79.0	1	42.2	79.1	2	13.4	0.1		31.2	1.65	2.20	2.80	7
	Route 3	7A	87.9	1	52.9	89.0	2	38.8	1.1		45.9	2.15	2.80	3.55	20
Route 6	8	91.1	1	56.1	94.7	2	50.8	3.6		54.7	2.45	3.20	4.05	40	
Zone 3 Mt. Holly	Bordentown	4	13.8		20.6	9.9		15.3	-3.9		-5.3	0.15	0.20	0.25	0
	Hightstown	4A	27.1		36.3	23.2		35.5	-3.9		-0.8	0.40	0.50	0.65	0
	New Brunswick	5	43.6		56.8	41.4	1	03.3	-2.2		6.5	0.65	0.80	1.05	0
	Route 35	5A	52.3	1	08.3	50.3	1	18.6	-2.0		10.3	0.95	1.20	1.55	0
	Elizabeth	6	60.7	1	17.7	57.8	1	34.4	-2.9		16.7	1.25	1.60	2.05	5
	Port Street	6A	65.0	1	22.4	63.6	1	48.4	-1.4		26.0	1.55	2.00	2.55	5
	Route 3	7A	73.9	1	33.1	73.5	2	13.8	-0.4		40.7	2.00	2.60	3.30	15
Route 6	8	77.1	1	36.3	79.2	2	25.8	2.1		49.5	2.30	3.00	3.80	35	
Zone 4 Bordentown	Hightstown	4A	15.6		21.8	13.3		20.2	-2.3		-1.6	0.25	0.30	0.40	0
	New Brunswick	5	32.1		42.3	31.5		48.0	-0.6		5.7	0.50	0.60	0.80	0
	Route 35	5A	40.9		53.8	40.4	1	03.3	-0.5		9.5	0.80	1.00	1.30	0
	Elizabeth	6	49.2	1	03.2	47.9	1	19.1	-1.3		15.9	1.10	1.40	1.80	0
	Port Street	6A	53.5	1	07.9	53.7	1	33.1	0.2		25.2	1.40	1.80	2.30	5
	Route 3	7A	62.4	1	18.6	63.6	1	58.5	1.2		39.9	1.85	2.40	3.05	17
Route 6	8	65.6	1	21.8	69.3	2	10.5	3.7		48.7	2.15	2.80	3.55	35	
Zone 4A Hightstown	New Brunswick	5	19.3		26.9	18.2		27.8	-1.1		0.9	0.25	0.30	0.40	0
	Route 35	5A	28.0		38.4	27.1		43.1	-0.9		4.7	0.55	0.70	0.90	0
	Elizabeth	6	36.4		47.8	34.6		58.9	-1.8		11.1	0.85	1.10	1.40	0
	Port Street	6A	40.7		52.5	40.4	1	12.9	-0.3		20.4	1.15	1.50	1.90	0
	Route 3	7A	49.6	1	03.2	50.3	1	38.3	0.7		35.1	1.60	2.10	2.65	15
Route 6	8	52.8	1	06.4	56.0	1	50.3	3.2		43.9	1.90	2.50	3.15	30	

NEW JERSEY TURNPIKE

DISTANCES AND TRAVEL TIME FOR TRUCKS BETWEEN COMMON POINTS OF ZONES BY ROUTE U.S. 130 AND THE TURNPIKE  
TOGETHER WITH PER CENT OF TRUCKS ESTIMATED TO BE DIVERTED FROM ROUTE U.S. 130 TO THE TURNPIKE

From	To Zone		By New Jersey Turnpike			By U.S. 130			Savings by Turnpike			Proposed Toll Rates			% Diverted
			Distance Miles	Time		Distance Miles	Time		Distance Miles	Time		2 Axle	3 Axle Single Unit	Semi- Trailer	
				Hrs.	Min.		Hrs.	Min.		Hrs.	Min.				
Zone 5 New Brunswick	Route 35	5A	11.9		19.2	8.9		15.3	-3.0		-3.9	\$0.15	\$0.20	\$0.25	0
	Elizabeth	6	20.3		28.6	16.4		31.1	-3.9		2.5	0.45	0.60	1.00	0
	Port Street	6A	24.6		33.3	22.2		45.1	-2.4		11.8	0.90	1.20	1.50	0
	Route 3	7A	33.5		44.0	32.1	1	10.5	-1.4		26.5	1.35	1.80	2.25	5
	Route 6	8	36.7		47.2	37.8	1	22.5	1.1		35.3	1.65	2.20	2.75	25
Zone 5A Route 35	Elizabeth	6	11.3		20.2	9.1		15.8	-2.2		-4.4	0.45	0.60	0.75	0
	Port Street	6A	15.6		24.9	14.9		29.8	-0.7		4.9	0.75	1.00	1.25	0
	Route 3	7A	24.4		35.6	24.8		55.2	0.4		19.6	1.20	1.60	2.00	10
	Route 6	8	27.7		38.8	30.5	1	07.2	2.8		28.4	1.50	2.00	2.50	25
Zone 6 Elizabeth	Port Street	6A	7.6		12.6	5.8		14.0	-1.8		1.4	0.30	0.40	0.50	0
	Route 3	7A	16.5		23.3	15.7		39.4	-0.8		16.1	0.75	1.00	1.25	0
	Route 6	8	19.7		26.5	21.4		51.4	1.7		24.9	1.05	1.40	1.75	15
Zone 6A Port Street	Route 3	7A	10.4		15.2	9.9		25.4	-0.5		10.2	0.45	0.60	0.75	0
	Route 6	8	13.6		18.4	15.6		37.4	2.0		19.0	0.75	1.00	1.25	20
Zone 7 Raymond Blvd.	Route 3	7A	8.2		12.8	7.1		19.5	-1.1		6.7	0.30	0.40	0.50	0
	Route 6	8	11.4		16.0	12.8		31.5	1.4		15.5	0.60	0.80	1.00	10
Zone 7A Route 3	Route 6	8	6.00		9.9	5.7		12.0	-0.3		2.1	0.30	0.40	0.50	0

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL TRUCK MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF TRUCKS DIVERTED TO THE TURNPIKE,  
THE TOLL BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	2 Axle Trucks			3 Axle Single Unit Trucks			Semi-Trailer Trucks			Total Trucks			Toll			Revenue		
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	2 Axle	3 Axle Single Unit	Semi-Trailer	2 Axle	3 Axle Single Unit	Semi-Trailer
Pennsville	0-1	2,508			912			4,788			8,208			\$0.25	\$0.30	\$0.40			
Pennsville	0-2	9,842			646			11,628			22,116			0.50	0.60	0.80			
Pennsville	0-2A	1,634						1,368			3,002			0.65	0.80	1.05			
Pennsville	0-3	1,330	5	67	76	5	4	3,344	5	167	4,750	5	238	0.80	1.00	1.30	\$ 54	\$ 4	\$ 217
Pennsville	0-4	6,612	7	463	798	7	56	9,728	7	681	17,138	7	1,200	0.95	1.20	1.55	440	67	1,056
Pennsville	0-4A	4,408	8	353	570	8	46	7,182	8	575	12,160	8	974	1.20	1.50	1.95	424	69	1,121
Deans	0-4A							286	15	43	286	15	43	1.20	1.50	1.95			84
Cranbury	0-5	1,362	15	204	1,022	15	153	18,103	15	2,715	20,487	15	3,072	1.45	1.80	2.35	296	275	6,380
Deans	0-5	96	50	48	143	50	72	1,293	50	647	1,532	50	767	1.45	1.80	2.35	70	130	1,520
Cranbury	0-5A	3,774	17	642	2,744	17	466	17,761	17	3,019	24,279	17	4,127	1.60	2.00	2.60	1,027	932	7,849
Deans	0-5A	551	55	303	36	55	20	829	55	456	1,416	55	779	1.60	2.00	2.60	485	40	1,186
Cranbury	0-6	681	25	170	779	25	195	10,725	25	2,681	12,185	25	3,046	2.05	2.60	3.35	349	507	8,981
Deans	0-6	143	55	79		55		384	55	211	527	55	290	2.05	2.60	3.35	162		707
Cranbury	0-6A	24,874	30	7,462	40,743	30	12,223	180,334	30	54,100	245,951	30	73,785	2.35	3.00	3.85	17,536	36,669	208,285
Deans	0-6A	2,619	60	1,571	717	60	430	15,504	60	9,302	18,840	60	11,303	2.35	3.00	3.85	3,692	1,290	35,813
Cranbury	0-7A	12,579	50	6,290	6,946	50	3,473	55,238	50	27,619	74,763	50	37,382	2.80	3.60	4.50	17,612	12,503	124,285
Deans	0-7A	2,995	65	1,947	1,064	65	692	4,709	65	3,061	8,768	65	5,700	2.80	3.60	4.50	5,452	2,491	13,775
Cranbury	0-8	13,142	60	7,885	15,972	60	9,583	89,472	60	53,683	118,586	60	71,151	3.10	4.00	4.50	24,444	38,332	241,574
Deans	0-8	1,912	70	1,338	144	70	101	3,013	70	2,109	5,069	70	3,548	3.10	4.00	4.50	4,148	404	9,491
Total		91,062		28,822	73,312		27,514	435,689		161,069	600,063		217,405				76,191	93,713	662,324
Chester	1-2	11,726			972			7,638			20,336			0.25	0.30	0.40			
Chester	1-2A	939			168			469			1,576			0.40	0.50	0.65			
Chester	1-3	536			200			737			1,473			0.55	0.70	0.90			
Chester	1-4	1,775	5	89	100	5	5	4,655	5	233	6,530	5	327	0.70	0.90	1.15	62	5	268
Chester	1-4A	1,373	5	69	200	5	10	1,107	5	55	2,680	5	134	0.95	1.20	1.55	66	12	85
Cranbury	1-5	195	7	14	146	7	10	5,549	7	388	5,890	7	412	1.20	1.50	1.95	17	15	757
Deans	1-5							95			95			1.20	1.50	1.95			
Cranbury	1-5A	1,043	10	104	292	10	29	6,550	10	655	7,885	10	788	1.35	1.70	2.20	140	49	1,441
Deans	1-5A	48			48			334			430			1.35	1.70	2.20			
Cranbury	1-6	146	10	15				146	10	15	146	10	15	1.80	2.30	2.95	27		
Deans	1-6	48	10	5				48	10	5	48	10	5	1.80	2.30	2.95	9		
Cranbury	1-6A	3,519	15	528	5,011	15	752	56,095	15	8,414	64,625	15	9,694	2.10	2.70	3.45	1,109	2,030	29,028
Deans	1-6A	191	10	19				1,147	10	115	1,338	10	134	2.10	2.70	3.45	40		397
Cranbury	1-7A	1,378	35	482	828	35	290	19,020	35	6,657	21,226	35	7,429	2.55	3.30	4.20	1,229	957	27,959
Deans	1-7A	192	15	29				381	15	57	573	15	86	2.55	3.30	4.20	74		239
Cranbury	1-8	1,704	50	852	1,656	50	828	19,380	50	9,690	22,740	50	11,370	2.85	3.70	4.50	2,428	3,064	43,605
Deans	1-8	96	50	48				574	50	287	670	50	335	2.85	3.70	4.50	137		1,292
Total		24,909		2,254	9,621		1,924	123,731		26,551	158,261		30,729				5,338	6,132	105,071

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NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL TRUCK MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF TRUCKS DIVERTED TO THE TURNPIKE,  
THE TOLL BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	2 Axle Trucks			3 Axle Single Unit Trucks			Semi-Trailer Trucks			Total Trucks			Toll			Revenue		
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	2 Axle	3 Axle Single Unit	Semi-Trailer	2 Axle	3 Axle Single Unit	Semi-Trailer
Cranbury	2-4A	341						195			536			\$0.70	\$0.90	\$1.15			
Cranbury	2-5	1,168			49			2,579			3,796			0.95	1.20	1.55			
Deans	205	191	5	10				48	5	2	239	5	12	0.95	1.20	1.55	\$ 10		\$ 3
Cranbury	2-5A	1,436	5	72	145	5	7	1,634	5	82	3,215	5	161	1.10	1.40	1.80	79	\$ 10	148
Deans	2-5A	240	5	12	48	5	2	288	5	14	288	5	14	1.10	1.40	1.80	13	3	
Cranbury	2-6	637	7	45	97	7	7	1,515	7	106	2,249	7	158	1.55	2.00	2.55	70	14	270
Deans	2-6	48	6	3				48	6	3	48	6	3	1.55	2.00	2.55	5		
Cranbury	2-6A	21,336	10	2,134	2,239	10	224	27,852	10	2,785	51,427	10	5,143	1.85	2.40	3.05	3,948	538	8,494
Deans	2-6A	912	10	91	48	10	5	960	10	96	960	10	96	1.85	2.40	3.05	168	12	
Cranbury	2-7A	4,239	30	1,272	488	30	146	5,270	30	1,581	9,997	30	2,999	2.30	3.00	3.80	2,926	438	6,008
Cranbury	2-8	2,630	40	1,052	439	40	176	6,866	40	2,746	9,935	40	3,974	2.60	3.40	4.30	2,735	598	11,808
Deans	2-8	336	50	168				143	50	72	479	50	240	2.60	3.40	4.30	437		310
Total		33,514		4,859	3,553		567	46,102		7,374	83,169		12,800				10,391	1,613	27,041
Cranbury	2A-4A	973						390			1,363			0.55	0.70	0.90			
Deans	2A-4A	526						718			1,244			0.55	0.70	0.90			
Cranbury	2A-4	2,824			438			3,849			7,111			0.80	1.00	1.30			
Deans	2A-5	5,211			1,436			22,960			29,607			0.80	1.00	1.30			
Cranbury	2A-5A	7,508			868			13,208			21,584			0.95	1.20	1.55			
Deans	2A-5A	5,032			1,998			21,121			28,151			0.95	1.20	1.55			
Cranbury	2A-6	2,191	5	110	405	5	20	4,718	5	236	7,314	5	366	1.40	1.80	2.30	154	36	543
Deans	2A-6	3,680			820			12,032			16,532			1.40	1.80	2.30			
Cranbury	2A-6A	28,973	7	2,028	4,574	7	320	41,563	7	2,909	75,110	7	5,257	1.70	2.50	2.80	3,448	800	8,145
Deans	2A-6A	32,358			5,888			127,682			165,928			1.70	2.50	2.80			
Cranbury	2A-7A	13,361	20	2,672	1,793	20	358	13,523	20	2,705	28,677	20	5,735	2.15	3.10	3.55	5,745	1,110	9,603
Deans	2A-7A	17,302			2,598			41,236			61,136			2.15	3.10	3.55			
Cranbury	2A-8	6,912	40	2,765	1,558	40	623	12,997	40	5,198	21,467	40	8,586	2.45	3.50	4.05	6,774	2,181	21,052
Deans	2A-8	9,666			1,915			42,799			54,380			2.45	3.50	4.05			
Total		136,517		7,575	24,291		1,321	358,796		11,048	519,604		19,944				16,121	4,127	39,343
Cranbury	3-4A	49						147			196			0.40	0.50	0.65			
Cranbury	3-5	925						535			1,460			0.65	0.80	1.05			
Deans	3-5	669						480			1,149								
Cranbury	3-5A	1,886			97			1,320			3,303			0.80	1.00	1.30			
Deans	3-5A	846			288			286			1,420								
Cranbury	3-6	738	5	37				98	5	5	836	5	42	1.25	1.60	2.05	46		10
Deans	3-6	239			143			335			717								
Cranbury	3-6A	6,376	5	319	682	5	34	8,454	5	422	15,512	5	775	1.55	2.00	2.55	494	68	1,076
Deans	3-6A	813						717			1,530								
Cranbury	3-7A	1,028	15	154	98	15	15	1,616	15	242	2,742	15	411	2.00	2.60	3.00	308	39	726
Deans	3-7A	637			47			143			827								
Cranbury	3-8	779	35	273				1,071	35	375	1,850	35	648	2.30	3.00	3.80	628		1,425
Deans	3-8	240						48			288								
Total		15,225		783	1,355		49	15,250		1,044	31,830		1,876				1,476	107	3,237

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL TRUCK MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF TRUCKS DIVERTED TO THE TURNPIKE,  
THE TOLL BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	2 Axle Trucks			3 Axle Single Unit Trucks			Semi-Trailer Trucks			Total Trucks			Toll			Revenue		
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	2 Axle	3 Axle Single Unit	Semi-Trailer	2 Axle	3 Axle Single Unit	Semi-Trailer
Cranbury	4-4A	341									341			\$0.25	\$0.30	\$0.40			
Cranbury	4-5	2,970						536			3,506			0.50	0.60	0.80			
Deans	4-5				144						144								
Cranbury	4-5A	2,148						1,392			3,540			0.65	0.80	1.05			
Cranbury	4-6	756			438			633			1,827			1.10	1.40	1.80			
Deans	4-6							286			286								
Cranbury	4-6A	4,325	5	216	924	5	46	6,012	5	301	11,261	5	563	1.40	1.80	2.30	\$ 302	\$ 83	\$ 692
Deans	4-6A	96						144			240								
Cranbury	4-7A	996	17	169		17		2,286	17	389	3,282	17	558	1.85	2.40	3.05	313		1,186
Deans	4-7A							527			527								
Cranbury	4-8	1,121	35	392	293	35	103	1,798	35	330	3,222	35	1,125	2.15	2.80	3.55	843	288	2,237
Deans	4-8	96						816			912								
Total		12,849		777	1,799		149	14,430		1,320	29,078		2,246				1,458	371	4,115
Cranbury	4A-5	15,189			438			1,948			17,575								
Deans	4A-5	32,901			1,390			7,127			41,418								
Cranbury	4A-5A	7,318			681			2,861			10,860								
Deans	4A-5A	16,528			3,587			18,626			38,741								
Cranbury	4A-6	2,611			147			645			3,403								
Deans	4A-6	5,955			242			3,531			9,728								
Cranbury	4A-6A	16,375			780			3,526			20,681								
Deans	4A-6A	41,450			3,143			47,486			92,079								
Cranbury	4A-7A	2,470	15	371	292	15	44	2,103	15	315	4,865	15	730	1.60	2.10	2.65	594	92	835
Deans	4A-7A	10,153			1,153			8,609			19,915								
Cranbury	4A-8	2,288	30	686	536	30	161	1,427	30	428	4,251	30	1,275	1.90	2.50	3.15	1,303	403	1,348
Deans	4A-8	5,030			395			7,888			13,313								
Total		158,268		1,057	12,784		205	105,777		743	276,829		2,005				1,897	495	2,183
Cranbury	5-5A	2,192			146			488			2,826								
Deans	5-5A	8,470			621			3,778			12,869								
Cranbury	5-6	97						49			146								
Deans	5-6	1,293						144			1,437								
Communi-paw	5-7A	16,848	5	842	156	5	8	9,620	5	481	26,624	5	1,331	1.35	1.80	2.25	1,137	14	1,082
Ridgefield	5-8	7,228	15	1,084	208	15	31	11,648	15	1,747	19,084	15	2,862	1.65	2.20	2.75	1,789	68	4,804
Total		36,128		1,926	1,131		39	25,727		2,228	62,986		4,153				2,926	82	5,886

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

NEW JERSEY TURNPIKE

STATEMENT SHOWING TOTAL POTENTIAL TRUCK MOVEMENT BETWEEN ZONES,  
ESTIMATED PER CENT AND NUMBER OF TRUCKS DIVERTED TO THE TURNPIKE,  
THE TOLL BETWEEN ZONES AND THE TOLL REVENUE FROM THE VEHICLES DIVERTED

Survey Station	Movement	2 Axle Trucks			3 Axle Single Unit Trucks			Semi-Trailer Trucks			Total Trucks			Toll			Revenue		
		Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	Number	% Diverted	Number Diverted	2 Axle	3 Axle Single Unit	Semi-Trailer	2 Axle	3 Axle Single Unit	Semi-Trailer
Communipaw Communipaw	6A-7A	79,664			2,028			32,604			114,296								
	6A-8	22,672	10	2,267	1,560	10	156	35,152	10	3,515	59,384	10	5,938	\$0.75	\$1.00	\$1.25	\$ 1,700	\$ 156	\$ 4,394
Total		102,336		2,267	3,588		156	67,756		3,515	173,680		5,938				1,700	156	4,394
Newark Pike Newark Pike	7-7A	297,128			5,148			111,332			413,608								
	7-8	31,616	5	1,581	4,940	5	247	26,782	5	1,339	63,338	5	3,167	0.75	1.00	1.25	1,186	247	1,674
Total		328,744		1,581	10,088		247	138,114		1,339	476,946		3,167				1,186	247	1,674
Communipaw Communipaw	7-7A	210,372			6,344			41,340			258,056								
	7-8	56,420	5	2,821	2,184	5	109	60,580	5	3,029	119,184	5	5,959	0.75	1.00	1.25	2,115	109	3,786
Total		266,792		2,821	8,528		109	101,920		3,029	377,240		5,959				2,115	109	3,786
Ridgefield	7A-8	531,960			12,896			125,321			670,177								
GRAND TOTAL		1,738,304		54,722	162,946		32,280	1,558,613		219,260	3,459,863		306,262				\$120,799	\$107,152	\$859,054

Total Revenue All Trucks \$1,087,005

Coverdale & Colpitts  
Consulting Engineers  
120 Wall St., New York

Rates of Growth  
Vehicular Traffic

Year	Pennsylvania Turnpike (000)	% Over Prev. Year	Penns- ville Ferry (000)	% Over Prev. Year	Trenton Bridges Total (000)	% Over Prev. Year
1926			280			
1927			335	19.6		
1928			370	10.4		
1929			430	16.2		
1930			500	16.3		
1931			557	11.4		
1932			525	-5.8		
1933			549	4.6		
1934			655	19.3		
1935			760	16.1		
1936			842	10.8		
1937			1,031	22.4		
1938			1,075	4.3		
1939			1,254	16.6		
1940			1,349	7.6		
1941	2,460		1,710	26.7	10,050	
1942	1,403	-43.0	1,131	-33.9	7,722	-23.2
1943	902	-35.7	937	-17.1	5,606	-27.4
1944	1,039	15.1	1,101	17.5	6,002	7.1
1945	1,499	44.2	1,311	19.0	6,567	9.4
1946	2,482	65.6	1,992	52.0	9,175	39.7
1947	2,970	19.7	2,138	7.3	9,827	7.1
1948	3,406	14.7	2,369	10.8	10,076	2.5
1949 Est.	3,800	11.6	2,786	17.6	10,404	3.3

Long-Term Trends

Time Interval	Facility	Total Per cent Increase	Average Per cent Increase Per Year
1931-1949	Pennsville Ferry	400.0	9.35
1940-1949	Pennsville Ferry	106.4	8.38
1941-1949	Pennsville Ferry	62.9	6.29
1941-1949	Pennsylvania Turnpike	54.5	5.58
1941-1949	Trenton Bridges	3.5	0.43

Rates of Growth  
Vehicular Traffic

Year	Holland Tunnel (000)	Lincoln Tunnel (000)	George Washington Bridge (000)	Total (000)	% Over Prev. Year	Trans-Hudson Ferries (000)	Total Trans-Hudson (000)	% Over Prev. Year
1927	986			986		15,088	16,074	
1928	8,745			8,745		11,985	20,730	29.0
1929	10,978			10,978	25.5	12,885	23,863	15.1
1930	12,067			12,067	9.9	13,708	25,775	8.0
1931	12,756		1,043	13,799	14.4	14,146	27,945	8.4
1932	11,404		5,510	16,914	22.6	11,655	28,569	2.2
1933	10,861		5,910	16,771	- 0.8	11,467	28,238	- 1.2
1934	10,787		6,258	17,045	1.6	11,913	28,958	2.5
1935	11,387		6,395	17,782	4.3	12,547	30,329	4.7
1936	11,887		7,057	18,944	6.5	12,629	31,573	4.1
1937	13,080	73	7,951	21,104	11.4	13,164	34,168	8.2
1938	12,446	1,791	7,694	21,931	3.9	13,061	34,992	2.4
1939	13,331	2,835	8,063	24,229	10.5	13,629	37,858	8.2
1940	13,331	3,913	8,456	25,700	6.1	13,714	39,414	4.1
1941	14,231	4,681	9,380	28,292	10.0	13,812	42,104	6.8
1942	11,286	4,235	7,382	22,903	-19.0	9,584	32,487	-22.8
1943	9,741	4,553	5,620	19,914	-13.1	5,913	25,827	-20.5
1944	11,655	5,708	7,137	24,500	23.0	5,757	30,257	17.2
1945	12,398	6,513	8,332	27,243	11.2	5,416	32,659	7.9
1946	15,351	9,610	12,365	37,326	37.0	6,145	43,471	33.1
1947	15,463	10,635	14,074	40,172	7.6	5,676	45,848	5.5
1948	15,600	11,121	15,484	42,205	5.1	5,373	47,578	3.8
Est. 1949	16,379	12,766	18,188	47,333	12.2	5,544	52,877	11.1

Long-Term Trends

Time Interval	Total Bridge and Tunnels		Total Trans-Hudson	
	Total Per Cent Increase	Average Per Cent Increase Per Year	Total Per Cent Increase	Average Per Cent Increase Per Year
1932-1949 - 17 years	179.8	6.24	89.2	3.83
1940-1949 - 9 years	84.2	7.03	34.2	3.33
1941-1949 - 8 years	67.3	6.64	25.6	2.89

Rates of Growth  
Vehicular Traffic

Year	Phila- delphia- Camden Bridge (000)	% Over Prev. Year	Tacony- Palmyra Bridge (000)	% Over Prev. Year	Burlington- Bristol Bridge	% Over Prev. Year	Total (000)	% Over Prev. Year
1927	8,593						8,593	
1928	9,725	13.2					9,725	13.2
1929	11,616	19.4					11,616	19.4
1930	12,285	5.8	1,396				13,681	17.8
1931	12,308	0.2	1,740	24.6	199,660		14,248	4.1
1932	10,805	-12.2	1,562	-10.2	230,523	15.4	12,597	-11.6
1933	9,887	-8.5	1,390	-11.0	209,025	-9.3	11,486	-8.8
1934	9,982	1.0	1,400	0.7	220,242	5.4	11,602	1.0
1935	10,156	1.7	1,471	5.1	238,119	8.1	11,865	2.3
1936	10,614	4.5	1,642	11.6	257,405	8.1	12,514	5.5
1937	12,293	15.8	1,936	17.9	285,048	10.7	14,514	16.0
1938	12,820	4.3	1,981	2.3	261,537	-8.2	15,063	3.8
1939	13,378	4.4	2,056	3.8	288,198	10.2	15,723	4.4
1940	14,136	6.0	2,211	7.5	323,769	12.3	16,720	6.3
1941	15,639	10.2	2,739	23.9	397,018	22.6	18,775	12.3
1942	12,463	-20.3	2,047	-25.3	394,763	-0.6	14,905	-20.6
1943	9,639	-22.7	1,397	-31.7	441,290	11.8	11,478	-23.0
1944	11,361	17.9	1,866	33.6	501,286	13.6	13,728	19.6
1945	12,640	11.3	2,211	18.5	507,451	1.2	15,358	11.9
1946	16,886	33.6	3,355	51.8	609,323	20.1	20,851	35.7
1947	18,107	7.2	3,856	14.9	627,323	3.0	22,591	8.3
1948	19,227	6.2	4,318	12.0	694,301	10.7	24,240	7.3
Est. 1949	20,955	9.0	5,130	18.8	848,000	22.1	26,933	11.1

Long-Term Trends For Three Facilities

Time Interval	Total Per Cent Increase	Average Per Cent Increase Per Year
1930-1949 - 19 years	96.9	3.5
1940-1949 - 9 years	61.1	5.5
1941-1949 - 8 years	43.4	4.6



NEW JERSEY TURNPIKEPOPULATION GROWTHNEW YORK CITY AND ADJACENT COUNTIES

Year	New York City (5 Boroughs)	Nassau County	Suffolk County	Westchester County	New York, Northeastern New Jersey Metropolitan District
1900	3,437,202	55,448	77,582	184,257	
1910	4,766,883	83,930	96,138	283,055	
1920	5,620,048	126,120	110,246	344,436	
1930	6,930,446	303,053	161,055	520,947	10,901,424
1940	7,454,995	406,748	197,355	573,558	11,690,520
1947 (Estimated)					12,684,000
	1.9*	5.1*	2.3*	2.9*	0.9*

NEW JERSEY COUNTIES ADJACENT TO TURNPIKE

Year	Bergen County	Passaic County	Essex County	Hudson County	Union County
1900	78,441	155,202	359,053	386,048	99,353
1910	138,002	215,902	512,886	537,231	140,197
1920	210,703	259,174	652,089	629,154	200,157
1930	364,977	302,129	833,513	690,730	305,209
1940	409,646	309,353	837,340	652,040	328,344
	4.2*	1.7*	2.1*	1.3*	3.0*

Year	Middlesex County	Mercer County	Burlington County	Camden County	Glouster County	Salem County
1900	79,762	95,365	58,241	107,643	31,905	25,530
1910	114,426	125,657	66,565	142,029	37,368	26,999
1920	162,334	159,881	81,770	190,508	48,224	36,572
1930	212,208	187,143	93,541	252,312	70,802	36,834
1940	217,077	197,318	97,013	255,727	72,219	42,274
	2.5*	1.8*	1.4*	2.2*	2.1*	1.3*

\* Average Annual Percentage Rate  
of Growth for periods shown.

NEW JERSEY TURNPIKEMOTOR VEHICLE REGISTRATIONS BY STATES

Year	New Jersey	New York	Pennsylvania	New England
1925	580,554	1,625,583	1,330,433	1,290,151
1926	651,415	1,815,434	1,455,184	1,378,721
1927	712,396	1,937,918	1,554,915	1,432,801
1928	758,430	2,083,942	1,642,207	1,523,298
1929	832,332	2,263,259	1,733,283	1,666,192
1930	852,850	2,307,730	1,753,521	1,698,619
1931	869,867	2,297,249	1,741,942	1,716,514
1932	854,782	2,249,509	1,665,418	1,610,419
1933	845,734	2,240,757	1,635,019	1,590,180
1934	864,641	2,273,686	1,681,202	1,649,692
1935	888,292	2,330,962	1,745,401	1,680,828
1936	943,412	2,543,542	1,918,116	1,772,050
1937	994,497	2,561,703	1,984,821	1,866,510
1938	1,000,684	2,584,123	1,976,466	1,861,483
1939	1,027,747	2,655,733	2,054,787	1,930,756
1940	1,086,966	2,743,014	2,145,849	2,019,944
1941	1,165,916	2,859,929	2,285,083	2,173,863
1942	1,108,912	2,586,038	2,155,509	2,066,944
1943	1,009,415	2,257,865	1,961,610	1,889,887
1944	1,024,400	2,255,000	1,894,300	1,886,000
1945	1,013,742	2,320,894	1,953,113	1,957,329
1946	1,119,317	2,631,925	2,175,421	2,176,004
1947	1,233,946	2,923,408	2,392,881	2,398,641
1948	1,331,916	3,195,072	2,570,792	2,491,616
1925-1948*	3.7	3.0	2.9	2.9
1931-1948*	2.5	2.0	2.3	2.2
1940-1948*	2.6	1.9	2.3	2.6

\* Average Annual Percentage Rate  
of Growth for Periods Shown.

NEW JERSEY TURNPIKE  
ANNUAL MOTOR VEHICLE REGISTRATION  
NEW JERSEY COUNTIES IN THE NEW YORK METROPOLITAN DISTRICT  
1925 - 1947

Year	Nine NJ Counties	Bergen County	Passaic County	Hudson County	Essex County	Union County
1925	397,193	34,618	46,590	63,605	114,398	39,825
1926	453,848	56,409	46,101	73,172	127,681	44,939
1927	494,929	64,824	49,975	73,761	141,270	50,570
1928	539,901	71,012	55,307	80,316	153,737	57,035
1929	592,746	82,262	59,006	85,999	168,848	63,863
1930	610,329	86,454	59,183	88,074	173,835	66,369
1931	625,918	90,756	61,541	90,137	176,535	68,837
1932	622,583	92,228	61,010	88,295	174,260	71,623
1933	595,795	83,475	57,409	88,834	175,141	66,183
1934	634,612	95,201	60,527	90,384	176,701	71,355
1935	654,204	98,404	61,654	95,340	181,898	72,946
1936	696,194	104,124	65,621	102,691	194,504	78,961
1937	738,419	109,778	69,538	110,310	204,570	84,660
1938	759,496	114,069	71,193	113,643	209,592	87,564
1939	768,680	116,344	73,419	114,615	208,164	89,128
1940	811,314	123,690	78,696	120,387	217,427	94,822
1941	870,897	132,857	85,639	127,004	231,245	102,979
1942	823,304	128,671	79,405	115,341	216,255	99,147
1943	736,852	107,262	73,508	103,207	198,814	93,272
1944	718,050	105,494	74,400	97,730	190,833	91,594
1945	749,756	111,477	77,792	99,324	200,268	95,066
1946	818,248	123,770	84,895	106,392	217,212	105,229
1947	903,767	134,937	94,186	120,276	239,816	116,028
1925-47*	3.8	6.4	3.3	2.9	3.4	5.0
1931-47*	2.3	2.5	2.7	1.8	1.9	3.3
1940-47*	1.5	1.3	2.6	Decr.	1.4	2.9

\* Average Annual Percentage Growth For Periods Shown.

